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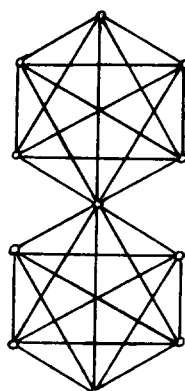
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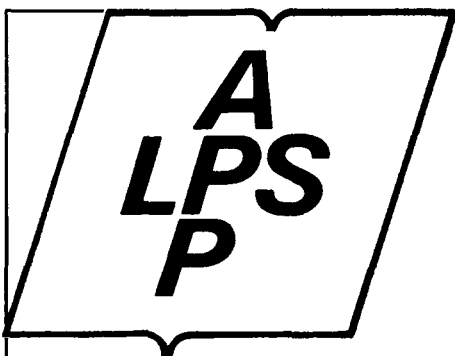
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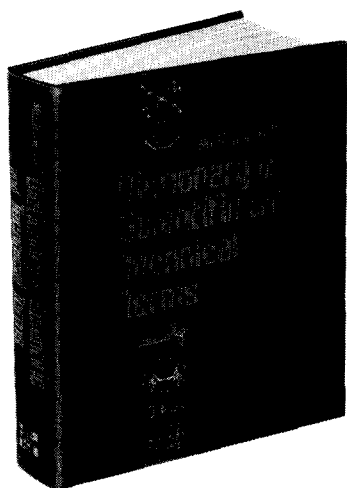
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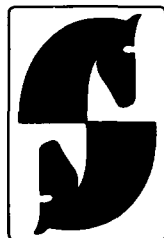
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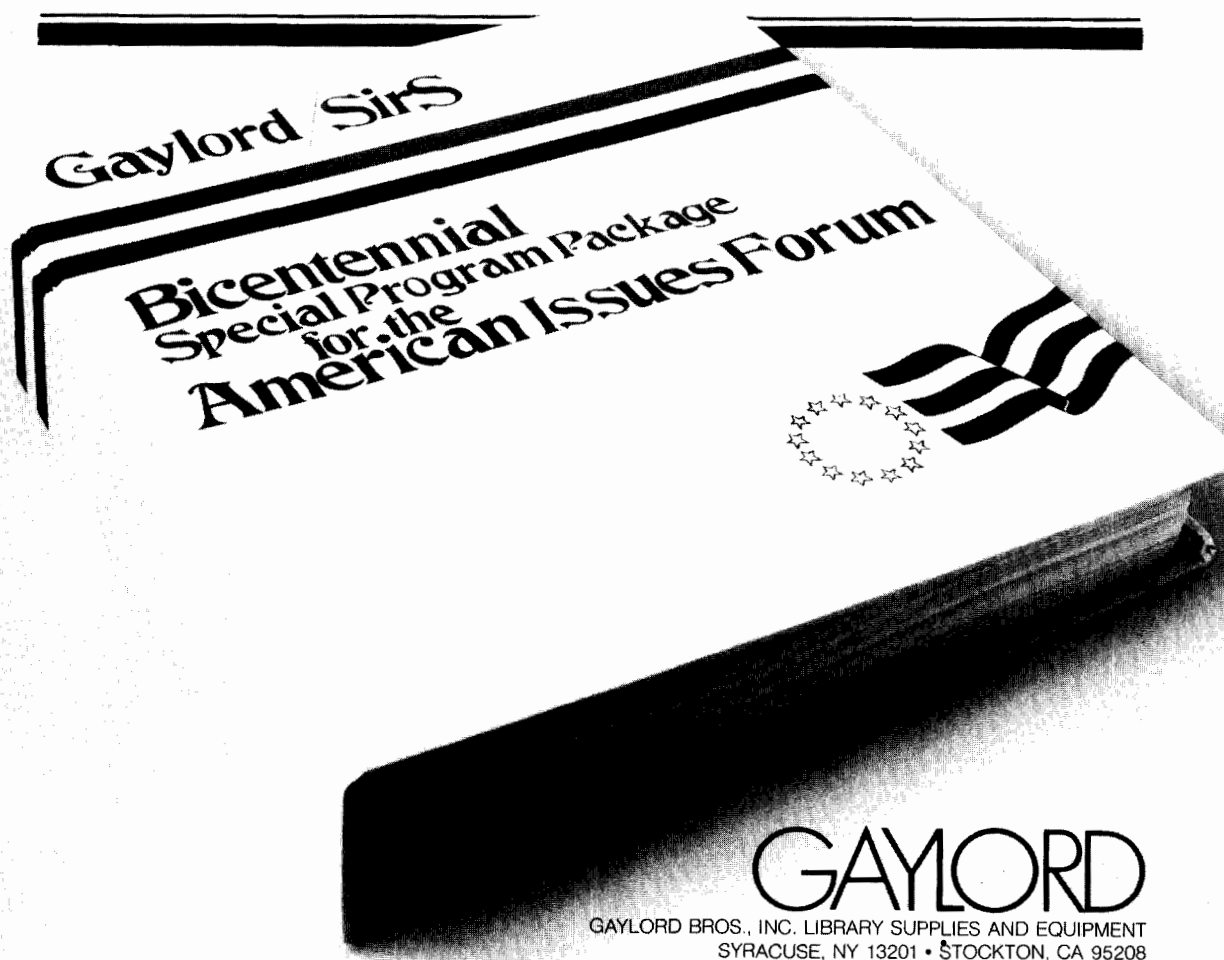
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Is SLA a Professional Association?

This statement by SLA's President-Elect Miriam Tees is presented in relation to the dues increase to be voted on by the members at the Annual Business Meeting. SLA President Edythe Moore's statement appeared in the March 1975 issue and SLA Executive Director F. E. McKenna's statement appeared in the April 1975 issue.

In the March issue of *Special Libraries* Edythe Moore discussed with you some of the reasons for the proposed dues increase.* One of the key paragraphs of her article was:

"There comes a time, of course, when the Association leadership can no longer turn away constructive programs which will advance the profession, and through the profession, its members. That time is *now*."

In fact, that time is long past. It has been my privilege to sit on the Board for most of the past five years, and one of the most painful exercises which I have undergone has been the annual agonizing over the budget and the necessity to pinch pennies. Obviously we must run a lean association, but when over and over again the Board has to turn down projects of value because it has no money for them, the Association approaches starvation.

What are some of these projects? They are, on the whole, related to the professional aspects of our Association work.

We would have liked, for example, to provide funds for research in special librarianship. At present our Research Committee is sponsoring a series of State-of-the-Art Reviews which can be funded from the Non-Serials Publication Fund. But budget constraints have hampered the programs of this Committee again and again.

We would like to increase our influence on education both of special librarians in library schools and to provide more continuing education for our members. A basic need is for a study of what is required to train special librarians. An excellent committee proposal had to be turned down because it was too expensive. A modified proposal has

been accepted involving the expenditure of 800 dollars—a sum which will barely cover minimal expenses of a consultant for two days. It has been our desire to take some of our excellent Continuing Education Seminars on the road so that members unable to attend Annual Conferences could benefit from them. Seed money is needed to do this. An association such as ours could benefit from an education specialist as a full time staff member. There is no money available.

Consultation, one of our most valuable community activities, has made friends for SLA in the past and will in the future. Our consultation service could be expanded to make us more visible to the community, and to perform a vital function in alerting those who need information to resources available. To expand the service, money is needed. It is not available.

The SLA Annual Conference is the third greatest source of income to the Association (after dues and subscriptions). We have come to count so heavily on this aspect of it that again we face cheese-paring in the services to members. We would like, for example, to offer copies of papers to all registrants, but this is too costly.

SLA is the third largest Library Association in the world, after ALA and the Library Association of Great Britain. We have both a desire and an obligation to participate in the work done by international library associations. In the past few years we have become more involved in IFLA and several of our members have attended the meetings. But we have no money to be sure that our representatives attend and take part. We have to rely to a great extent on members who pay for their own travel to the IFLA meetings. We have been fortunate to find good people to do this, but we may sacrifice continuity. Nor is IFLA the only association. Wherever international library activities are taking place, SLA should be involved.

Nor should we confine cooperation to the international field. Our Association should be involved in continental and national library efforts as well. Many of you will remember the controversy over our membership in AFIPS, for example. Whatever the philosophical arguments may be, a major reason for our questioning our place in AFIPS is one of "Can we afford it?" At this Winter Meeting we were asked if SLA would endorse the CLENE plan (Continuing Library Education Network and Exchange).

* The dues for Members and Associate Members from \$30 to \$40; the dues for Sustaining Members from \$100 to \$200.

We agreed to do so, hoping that it would not involve any money!

It is hard to think of any of our programs which are not in need of money—recruitment, positive action for minority groups, pilot education project on women in libraries, network planning, translations, standards: in fact, all of our significant professional activities.

In the minds of many people, more important than Association activities are Chapter and Division activities. Allotments to Chapters and Divisions were raised this year by 25¢ per member, but this amount is insignificant in the face of inflation. It is imperative that Chapters and Divisions have more money to work with. Merely publishing bulletins takes the whole of many allotments. Naturally it is essential for the units of the Association to take on projects which

will bring in money for more projects. But the basic allotment is now patently too low, and an increase will be one of the first moves by the budget committee when the dues increase goes through.

Many times I have heard people ask "Are we really a professional association?" How does one recognize a professional association? By the quality of its professional activities. While a dues increase will not permit SLA to fund all the activities it would like to fund, it will go a long way toward redressing the balance between our essential housekeeping and our professional program.

I urge you to support our professional programs.

Miriam Tees
President-Elect
Special Libraries Association

LETTERS

Better Than Expected

Shortly after my article, "Computer-Output Microfilm" appeared—in the April 1974 issue of *Special Libraries* [65 (no.4): 169–175]—I received letters reporting cost savings using COM that were far greater than the ones I had given.

Recently Grant MacLaren, Coordinator, Instructional Resources, Junior College District, St. Louis, gave me figures that were 1/5 and 1/3 of mine. I called the Data Processing Division, First National Bank of St. Louis, that is producing microfiche for him, to verify his claims. He was right. His cost for the first, the master, fiche is \$2.00 (my figure was \$10.00). Each subsequent copy costs \$.10 (my figure was \$.30). These figures make COM far more attractive than I had reported, especially since the price of paper has continued to rise during the past year and since so much of it ends up in the trash basket following the next update.

It should be noted that additional savings can be realized by formatting what goes on the fiche not by using the same paper print-out format but by reformatting for the fiche frame, so that there is no loss of space.

I also received letters about the journal, *COM*, which I mentioned in the article. *COM* is a special separate section of *Information and Records Management* with its

own cover, title, and numbering of issues from #1. According to the editorial by Rodd S. Exelbert in the first issue, it was to be "the first of a regular series." Unfortunately, it has not yet turned out to be a "regular series," but I am hopeful.

Doris Bolef
Higher Education Coordinating Council
St. Louis, Mo.

Fight Back

I am moved to comment on the frustrations of Anonymous (Letter to the Editor, *Special Libraries*, p.7A, October/November 1974).

An "O, woe is me" is bad enough. But an "O, woe is me" couched in anonymity is the end of the world. Few managers I know run to *Special Libraries* each month to glean recipes for salving the wounds of poor librarians. So what has this letter accomplished? Nothing but the proffer of a crying towel.

A nickel says the writer is a woman, has practiced "the trade" for at least ten years, wears glasses, and prefers the chignon. Another nickel says she lives in holy terror of being discovered dispensable.

How much better to have purged her misdeeds of its breast-beating, signed her name firmly, cheered in jubilation at its publication, and distributed autographed copies to every manager in her company.

Pardon the platitude, but the squeaky hinges do get the oil.

Celine H. Alvey
National Academy
of Science Library
Washington, D.C. 20418

Existence Reassured

I have just read "A Look at Bibliotherapy" [*Special Libraries* 66 (no.1): 27-31 (Jan 1975)] and, as Chairperson of the ALA Bibliotherapy Committee, feel compelled to respond. Ms. Horne states that she is enthusiastic about the potential of bibliotherapy but that little is currently being done in the field. Unfortunately, her Bibliography contains only one article written since 1971 and her article mentions neither the outstanding examples of bibliotherapy research in this decade nor the current successful Bibliotherapy Programs currently in existence in Washington, D.C., California, Louisiana, Wisconsin and other states.

I agree that we as librarians have much work ahead of us in training and certification of bibliotherapists and in additional research. The ALA Bibliotherapy Committee, reactivated in 1973, is concerning itself with these and other issues. The amount of response to the committee's goals demonstrates an active interest in bibliotherapy by librarians and by therapists.

Anyone interested in obtaining a Bibliography of materials on Bibliotherapy published from 1970-1974 or in receiving more committee information, please contact me. We welcome all persons interested in bibliotherapy, poetry therapy, literatherapy, or similar activities under other names.

Rhea Rubin
Cook County Corrections Project
Chicago Public Library
Chicago, Ill. 60624

I Disagree

Having read the article by Mr. Koenig of Pfizer in the December issue of *Special Libraries*, I feel compelled to reply.

As general manager of Taylor-Carlisle, and after twenty-five years as a book jobber, I continue to be surprised at the so-called "innovations" in book procurement. Most of these "innovations" are merely variations on a theme and are neither new nor more effective.

Pfizer has given both Eliot Books and McGraw-Hill Bookstore a \$500 deposit as a sort of guaranty of good faith for telephone orders. This is certainly good for Eliot and McGraw-Hill, but Pfizer has unnecessarily reduced its working capital by \$1000.

As Mr. Koenig pointed out in his article, librarians in special libraries are generally ordering books as a result of specific requests rather than for the purpose of building a collection. Delivery speed is essential. Book jobbers who deal heavily with special libraries are able to survive and grow because they accept telephone orders and ship from stock on the strength of these verbal orders. Taylor-Carlisle certainly does not require a deposit for this service, nor do I know of any other jobber who requires it. The fact that Pfizer has offered the deposit is puzzling; Mr. Koenig has made no real case for its advantages.

As advantages, Mr. Koenig cited speed of delivery. We, and most other special library book jobbers, ship out of stock within a few hours of a telephone order. Invoicing on telephone orders is quite simple and a confirming written order sent later is the only necessary support for the invoice.

Lastly, Mr. Koenig states that the deposit insures that the jobber's auditors will have no qualms about books delivered on the strength of telephone orders. Our auditors have never expressed such qualms, and we ship thousands of books in response to telephone orders. If this vital service were ever encumbered by requests for deposits, our customers would and should look elsewhere for a responsive jobber.

Stanley E. Anson
Taylor-Carlisle, Inc.
New York, N.Y. 10010

Special Libraries welcomes communications from its readers, but can rarely accommodate letters in excess of 300 words. Light editing, for style and economy, is the rule rather than the exception, and we assume that any letter, unless otherwise stipulated, is free for publication in our monthly letters column.

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Hits and Misses

Eileen W. English

Bell Laboratories, Whippany, N.J. 07981

■ Securing report literature can be a time-consuming, frustrating task for the uninitiated. Bell Laboratories circumvents that problem by providing a special library with a competent staff for procuring report literature and distrib-

uting it to its employees. The Technical Report Service has access to approximately one million titles, and makes its services available to all employees at all twenty-one Bell Laboratories locations.

A RECENT look at last year's activity showed that the Technical Report Service of Bell Laboratories had filled approximately 41,000 requests in 1973 for technical reports originating from sources outside the company.

There are seven on the staff who select pertinent new report literature, announce the titles in a semimonthly bulletin, procure the reports, and deliver them to all requesters. The Report Service, as part of the Bell Laboratories Library Network, is located in Whippany, N.J., and supplies the reports for employees at all twenty-one Bell Laboratories locations, even to the one on an atoll in the Pacific Ocean. The staff could be called upon by 17,000 people, but, in actuality, about 3,000 persons are regularly served.

The Importance of This Literature

Why this special handling of technical reports? All other technical literature is handled by the libraries at each Bell Labs location, but reports are special. Beyond their personal contacts, which are bound to be limited; beyond the

journal literature, which is slow, as well as limited; and beyond the conferences that they attend, which must be few, Bell scientists and engineers depend heavily on the report literature to keep them aware of developments in their fields. The amount of technical information available is overwhelming. The report literature, which is the first in print and covers a very broad range of subjects, is one of their largest sources of information.

It would be a foolish duplication of effort to have each employee secure his own reports, and how could he even be aware that they exist? It is our job, then, to seek out the reports that are related to Bell Labs' work and to make employees aware of their availability.

Selecting the reports for the Technical Report Service is done by one member of the staff. This could be a rough task, for it would seem difficult for one person to be aware of and have access to most of the current report literature, foreign as well as United States literature, on all the topics of interest to Bell Labs. Fortunately, being a selector is both stimulating and easy for a person with a broad

scientific background, an inquisitive mind, a liking for people, and an eye for detail. Every contact in the workday is a source of information, an opportunity to find out about a new area of interest to Bell Laboratories, or new emphasis in a familiar area. Attend a meeting, a luncheon, or see an old friend. The second question is almost invariably, "What do you do at Bell Labs?" Or, if it is an old friend, "What's new?" might bring some interesting answers.

How do you become aware of interests? All contacts. Announcements of meetings. Company newspapers. Buildings going up, people moving out—or in. Reorganizations. Changes in personnel. Telephone calls, both ways. Everything.

Availability

To learn about new reports and obtain them, we draw heavily on the resources of several government agencies that have depositories in the Washington, D.C. area, and that prepare announcement bulletins of their own. These bulletins include National Technical Information Service's *Government Reports Announcements* (GRA), NASA's *Scientific and Technical Aerospace Reports* (STAR), and the Defense Documentation Center's *Technical Abstract Bulletin* (TAB), with NTIS most heavily called upon. All of these bulletins are excellent sources of reports on worldwide R&D efforts in the sciences—physical, behavioral, computer, management, and military—and in engineering. But NTIS, because of its sheer size and its special services, is used most heavily and deserves special mention.

NTIS is the agency in the Commerce Department that receives, catalogs, reproduces, announces, and disseminates report literature generated by any number of sources under contract to, or sponsored by, the federal government. It draws from over 300 sources, and receives about 60,000 new titles per year—a figure that's *twice* as high as that for the entire book publishing industry. For the United States, Bell Labs is a major industrial user of NTIS material.

We subscribe to *GRA*, *STAR*, and *TAB*—the three announcement bulletins—and to their matching indexes, and also to NTIS's and DDC's biweekly computer tape services that list in machine-readable form all the new reports they have acquired. NTIS announces its reports in *GRA*, as mentioned above, and DDC announces its classified or limited-distribution reports in *TAB* and its unclassified in *GRA*. By subscribing to all these programs, we can locate and acquire close to one million documents. We therefore have access to almost any report on federal research completed since 1962.

In our own Report Service, we can draw from a collection of 30,000 paper copies of reports as well as from 25,000 microfiche which can be reproduced immediately in our area.

The Bell Labs Bulletin

Our readers don't have to search through these hundreds of thousands of titles for their information, however. Rather, they subscribe to the Report Service's *Current Technical Reports*, Bell Labs' own semimonthly bulletin. This bulletin contains the titles and abstracts of the documents selected by the service's report specialist for announcement to our employees for that period. They are selected from *GRA*, *TAB*, and *STAR*, and from the numerous reports we receive directly from other members of the research community both here and abroad—from the universities, research organizations, and private businesses.

Typically, the bulletin contains about 300 entries, separated into 19 subject categories. The reader need study only his category—a page or two—to be aware of the new reports on work in his specialty. Usually, he will read several categories, for no discipline is an entity to itself. And many scan the entire bulletin. It is purposely kept to an invitingly small size, which also eliminates the need for cross-referencing.

To prepare our bulletin, the report specialist selects from the above-men-

Table 1. Report Usage by Category

| Category | Titles | | | Total Requests |
|--------------------------------|-----------|-----------|-------------|----------------|
| | Announced | Requested | % Requested | |
| Biology, Behavior | 108 | 81 | 75.0 | 342 |
| Chemistry | 138 | 101 | 73.1 | 285 |
| Communications | 149 | 137 | 91.9 | 805 |
| Computers, Data Processing | 225 | 213 | 94.6 | 1845 |
| Detection, Countermeasures | 54 | 26 | 48.1 | 82 |
| Electrical Engineering: | | | | |
| Devices | 77 | 67 | 87.0 | 358 |
| Subsystems | 146 | 119 | 81.5 | 522 |
| Theory | 6 | 5 | 83.3 | 14 |
| Geophysics, Astronomy | 112 | 76 | 67.8 | 163 |
| Guided Missiles, Satellites | 5 | 4 | 80.0 | 18 |
| Management | 113 | 108 | 95.5 | 781 |
| Materials | 126 | 103 | 81.7 | 417 |
| Mathematics | 283 | 249 | 87.9 | 1237 |
| Mechanical Engineering | 62 | 55 | 88.7 | 223 |
| Military Science | 30 | 28 | 93.3 | 119 |
| Nuclear Science | 52 | 38 | 73.0 | 65 |
| Physics: | | | | |
| Plasmas, Fluids | 19 | 13 | 68.4 | 28 |
| Electricity, Optics, Magnetism | 63 | 52 | 82.5 | 156 |
| Acoustics, Solid State | 149 | 120 | 80.5 | 494 |
| TOTALS | 1917 | 1595 | 83.2 | 7954 |

tioned sources the titles and any accompanying information desired, and assigns subject categories to them.

Another member of the staff key-punches the information onto cards, or keys it directly into the computer via a terminal. In the case of NTIS and DDC selections, because Bell Labs has DDC's and NTIS's tape output, the keypuncher need key in only the document accession number. Our program will then pick off and print out the title information and abstracts for each number that was so keyed in. For other selections—hard copy or other announcements—the report specialist marks the category numbers and indicates descriptors. The key-puncher then keys in the accession number, title, category number, author, corporate source, date of publication, number of pages, and the descriptors directly from the document or its announcement. Information goes directly into the computer via the terminal or cards. The program then sorts all the information according to category, and prints out all the listings in a format ready for printing. The result is *Current Technical Reports*, a neat two-column 8½ in. x 11 in. paperback, with information divided into subject categories to make users' selecting easier.

The bulletin rarely exceeds 30 pages, depending, of course, on the amount of original material available in that particular period. Its cover is an attractive heavy brown-and-white paper, and serves an additional role: the back is perforated to provide two order forms, one for requesting documents listed in the bulletin, and the other for adding a name to the distribution list.

This service has operated as a separate unit within the Bell Laboratories Library Network for a little over ten years. It began as a manual operation, but with the growth of computer usage, it soon took advantage of the benefits of computerization. A system was designed and programmed which permitted use of DDC and NTIS data bases on magnetic tape. Trial and error produced an efficient, cost-effective system that has weathered several changes of computers at Bell Labs, changes in format of the government tapes, and the other on-going problems that beset any machine-based system. As workloads change or equipment is replaced or input is reformatted, the programs are adjusted to meet these situations.

To monitor the usage of our selections, we keep extensive computerized daily records of each transaction in our

area. Quarterly, we take a reading of our performance, count our "hits" and "misses," and look at the percentages of requests/selection for each category. Table 1 shows that at the present time, computer science shows heaviest usage, followed closely by mathematics and electrical engineering, the usual favorites. But this could change by the next quarter. If it does, then we must determine why the change occurred. Has the emphasis in that area changed, or were the selections off the mark?

The statistics also list titles of reports that had heavy usage and those that were not read at all. We try to avoid selecting titles that would provide only popular reading, such as current events that are not even peripherally related to our work.

The overall percentage of hits is high, and we maintain our rate rather steadily, with individual categories ranging from 50% to 90%. We always strive to increase our hit-rate, but, paradoxically, we know that if we ever do hit 100%, we have failed; we have not offered enough.

Technical Report Service is an interesting place to be, full of variety and surprises. It keeps us up on all the activity in Bell Laboratories, and also on much of the activity outside it. It lets us measure our effectiveness, and that has been better than an 80% hit-rate. We would like to do better—say, 99%?

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Eileen W. English is the technical report specialist, Technical Report Service, Bell Laboratories, Whippany, N.J.

Beating Inflation in Libraries

Charlotte Georgi

University of California, Los Angeles, Graduate School of Management,
Los Angeles, Calif. 90024

■ In what she hopes is a light and lively manner, the author discusses the very serious matter of how to operate a library in an economic period of less, and less, and most probably less. She bases her fifteen concepts of operational management (among which the fifth through

the fourteenth seem to be somewhat lost in the enumeration) and "Georgi's Seven Principles for Effective, Economical, and Efficient Utilization of Library Resources," on nearly twenty years of more or less good-humored experience with penny-pinching.

HOW DOES one go about saving money in a library? The best, although not the necessarily recommended way that I can think of to save money, is just not to have any. A few years ago, one of my library's positions was frozen for eleven months. We got along without it, not happily, not as well as with it, of course, but we got along—better than one would have expected, surprisingly enough. Of course, people rise to emergencies, if acute that is, and not continuously chronic. The morale difficulties usually arise, I have noted, in slack times or when tense situations are too prolonged—not when people are happily busy.

It is inevitable that I'll next refer to Parkinson's Law: "*Work expands proportionately to the time available for it to be done.*" When inflation hits, when costs rise, when budgets are cut, it is just as inevitable that we must consider Georgi's corollary: "*Work decreases in the same ratio if there is no time for it.*" In other words, budget cuts equal staff

cuts, work cuts, cuts in books and serials purchased, cuts in service, cuts in supplies and equipment, cuts in hours, cuts, cuts, cuts.

Now what are some specific solutions for this inflationary situation we are now in? What are some practical answers to the omnipresent spectre of decreased budgets?

If you don't have money, or even if you do, apply the rules of good management. As a business librarian for more years than I care to admit, I've always tried to do this anyway, good times or

A good staff is a good library

bad. As a public servant, I regard myself the custodian of the taxpayer's money. I want to do the best I can with what I have. W-I-N isn't specific enough, especially if you don't want R-O-T (Raise Our Taxes).

What are some of these concepts of operational, practical, not merely philosophical, good management?

FIRST: Get the best staff you possibly can. A good staff is a good library. Choose carefully for experience, competence, intelligence, personality, appearance; train thoroughly; supervise closely. Set the staff a good example, YOURSELF. Don't ask anyone to do anything you wouldn't do yourself. With a 50% annual turnover in the lower rank jobs, this is nearly a full-time managerial job for me, but well worth it.

SECOND: Apply the Golden Rule: He who has the Gold, *RULES*. . . . So pay good people as much as you can. There is no recognition of good work more effective than the monetary. If it is a question of having ten well-paid people or twenty underpaid, opt for the ten any day. Get rid of misfits and inadequates, once recognized, as rapidly as you can.

THIRD: Creative thinking and imagination are an imperative and also fun to exercise in operating anything. If God had meant us to think, he would have given us brains. In fact, while wool-gathering in a committee meeting the other day, I worked out the following equations:

When there were no books, there was thinking without reading.

Now there are so many books, we are reading without thinking.

Is the next step, thanks to computers, thinking without thinking?

Speaking of committees, even staff meetings, calculate the cost of each one you have. How true is the observation, "You can't expect anything great to come out of a committee?" How effective are team management, participatory management, collegial planning, and the various types of group think in terms of the money they cost for duplicated personnel time and effort?

FOURTH: Along with thinking and imagination, don't be afraid of change. As Bernard Shaw said, "Those who cannot change their minds, cannot change anything." Change is inevitable. Don't fight it, BUT also don't embrace it ea-

gerly and thoughtlessly just because it is change. Look into costs and complications carefully.

All of which means to say there is no problem, absolutely no problem, for which there is no solution, albeit that it may not be an easy one. Conversely, it may just be possible that there may also be a problem for every solution.

FIFTH through FOURTEENTH: What are some specific ways of saving money that are pets of mine?

Tell the staff the exact value of their time. This is very easy to do in a highly classified, stratified, and doubtless stultified academic bureaucracy. For example: \$2.53 an hour for the lowest paid student assistant; \$6.23 an hour for a top class clerical.

I have also, from time to time, given out a little card which I first saw in the office of my auto repair shop:

Why Is There Never Enough Time to Do It Right, But Always Enough Time to Do It Over?

Oddly enough, no one seems to think this is as funny as I do.

When people know how much their time is worth in dollars and cents, they can figure out what they are costing their employer: the state, the federal government, the taxpayer, private business, or whatever. If supervisors, they can also analyze the cost of whether they should spend their time at \$6.23 an hour to do what a student assistant at \$2.53 an hour could do as well, or whether whatever it was is worth doing at all!

In acquisitions, all orders over \$50.00 are checked with other related campus libraries, usually Law, Engineering, or Ed/Psych, and sometimes with other local resources. Then a decision is made whether to duplicate the title or put a location card in our public catalog.

There is also a University of California (all nine campuses) Libraries Clearinghouse (Stanford is included, too) located at Berkeley. All monographs or multivolume sets over \$150.00 are re-

ported to it for checking. All current serials and backsets, regardless of price, are also cleared through it.

Of course, the customary printed form letters and postcards are used for ordering, claiming, notifying, etc. The photocopier is used quite lavishly, especially with overdues and faculty inventories, as well as the dittograph and multilith to save repetitive typing time. Obviously, the relative costs of the various methods are considered. Is a photocopy cheaper than a carbon copy? When does dittograph become cheaper than photocopying? Mimeographing? Multilithing, etc.?

Other improvements in the work processes themselves can be made, and should be, regardless of the need to save money: in eliminating files altogether or in interfiling; in examining very closely whether certain accepted routine procedures are REALLY necessary; in eliminating busy-busy work; in cutting down on the frequency of notices and overdues, and so forth.

Simplification is an essential in economy and it seems to be increasingly difficult to practice. A man wise in the ways of bureaucratic trivia once said to me: "Things are very unclear and any attempt to clarify them will distort the facts."

Creative thinking and imagination are an imperative . . .

My favorite of all the devices we employ to save reference service time is a series of Information and Reference Guides which have been devised and developed over the past twenty years at both the University of North Carolina and here at UCLA. Copies of the current list of titles in print are available from the Publication Office of the Graduate School of Management, UCLA Campus, Los Angeles 90024, 25¢ service charge.

Since everyone on our staff, trained librarians, full-time clerical and part-time student assistants, works at the public desk during the 79 hours a week the Li-

brary is open, we find these guides of inestimable use both to the library staff who can hand them out in answer to relevant questions and to library users who can just pick most of them up at the FREE MATERIALS shelf. Call numbers and locations are given for all titles cited, which helps both the staff and the users in vaulting the catalog hurdle.

Simplification is an essential in economy . . .

It is almost axiomatic that what is good for the library staff is good for the library user, and vice versa. There is nothing new about bibliographic guides, book lists, and checklists. They are old ideas but good ones, especially when tailored to the needs and dimensions of a particular library situation.

Returning to reference, I am continuously amazed at how much fuss can be made over the simplest questions. I am working on a list of ten reference books *sine qua non*. The first of these is the dictionary; then the *World Almanac*, the yellow pages of the telephone directory, and the *United States Statistical Abstract*. Any suggestions for the other six? In any event, I think 80%, if not more, of our questions could be answered out of such a limited list.

FIFTEENTH: And now, to conclude, here are Georgi's Seven Principles for the most effective, economical, and efficient utilization of available library resources:

1. **HARD WORK:** Even go so far as to like your job!
2. **WATCH YOUR MONEY.** In other words, act like it's your own. Unfortunately, in a large organization, especially when not-for-profit, everybody's money is often treated like nobody's money, the taxpayer's.
3. **Assemble a GOOD STAFF.** A good staff is a good library.
4. **SIMPLIFY.** Simplicity is the mother of efficiency, economy, and effectiveness.

5. **THINK.** Use creative imagination in solving the multiplicity of inevitable problems.

6. **A SENSE OF HUMOR** never hurt anything—except those who have to listen to your jokes.

7. And, as a last resort, there are always Faith, Hope, and Charity, but the greatest of these is **HARD WORK.** . . . always remembering the tried truism, “Do as I do, not as I say. . . .”

In short, library management is a Kafkaesque game of playing three dimensional chess in your mind without knowing the rules.

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Charlotte Georgi is chief librarian, Graduate School of Management, University of California, Los Angeles.

Survey of Users of a Medium-Sized Technical Library

Jerome P. Fatcheric

Bristol Laboratory, Syracuse, N.Y.

■ A user evaluation of library services and facilities was conducted to allow users to express their opinions and suggest improvements. A structured interview using multiple choice and open-ended questions was administered to thirty-two persons (14% sample) of the potential user population of the Bristol Laboratory Library. The main finding was a dichotomy of the user population

into director and non-director subgroups. These subgroups differ in attitudes about and usage of the library. In addition, results indicate that the entire population views the library as a passive archival source. These and other results were used to make recommendations for management to improve library services.

ANY LIBRARY or information service is in the business of providing service to its user group. To be most functional the services it provides should correspond as closely as possible to the needs of the users. In the past this correspondence has been based on intuition or tradition. What is obviously more reasonable is to submit these intuitive feelings and traditions to scientific assessment. This idea is supported by the following:

"A determination of the needs of users is absolutely essential to the management of an information center."

R. W. Coover (1)

"Periodically it is necessary to canvass the user population of a special library to de-

termine whether the objectives of the library are being met."

C. E. Bare (2)

Despite this generally recognized need in the library profession, this author has found the literature of user surveys to be small. In library research as a whole, there exists a large quantity of surveys and studies but few have approached the user to elicit his evaluation of library services. Articles in the area of user evaluation can be divided into three types: 1) methodology without actual study; 2) reviews of former studies; 3) original research.

In the first group are Bare (2), Davis (3), and Miller (4). Bare and Davis both discuss the questionnaire, diary, and interview methods but Davis also includes the critical incident method. Each adds details and recommendations about these methods. Miller discusses how to select aspects of the library for user eval-

Jerome P. Fatcheric was with Bristol Laboratory, Syracuse, N.Y. He is now with AMP, Inc., Harrisburg, Pa.

uation and describes a method for analyzing the data once gathered to determine the key areas for development.

Reviews of user surveys have been written by Barnes (5), Coover (1), Elman (6), and Wood (7). Coover covered the literature from 1953 to 1966 and uses his summary to make conclusions regarding user surveys. Woods reviewed the literature from 1966 to 1970 and also makes comments drawn from his review. Barnes attempts to integrate some recent surveys and to show what agreement exists among them. Finally, Elman briefly summarizes a number of user surveys and from this makes his own conclusions regarding needed library changes.

Four studies form the last group of original research. Friedlander (8) used mailed questionnaires with open-ended questions to determine needed information services for physicians. Kramer (9) also used mailed questionnaires and personal interviews to illustrate the cost savings accomplished by the library's literature searches. Landau (10) describes the methodology (interview method with structured guide) of his survey but does not include the actual results. Strain (11) discusses the findings of a questionnaire survey of users of an engineering library.

The published literature is of most value in the methodology of a user evaluation survey. The need for more reports of research to be published is urgent if we are to display how well library objectives are being met in actual situations.

Purpose of This Survey

Most of the published literature on user surveys is little more than generalities and esoteric information. It is difficult to see how much of it has been utilized to improve library services. This survey was designed to allow users to express their opinions concerning the existing facilities and services and to make suggestions for improvements. The goal of the survey was to translate this information into concrete suggestions for management to improve library services.

The survey became a mobile, dynamic suggestion box with a direct channel to management.

Setting

Bristol Laboratory (Syracuse, N.Y.) is a subsidiary of the Bristol-Myers Company and manufactures various pharmaceutical products. The information area is divided into two departments, the library and the information services department. The library contains approximately twenty thousand volumes which includes books and bound journals. The information services department utilizes the library collection and commercial computer data bases to do searches and answer reference questions for users. This department also produces monthly bibliographies through literature scanning. Together the two departments work primarily to fulfill the information needs of over two hundred researchers.

Methodology

The first step was to determine what services the library and information services (hereafter referred to collectively as the library) provide and which of those were most important to evaluate. The major areas chosen were the book and journal collections, the monthly bibliographies, the computer data bases, library comfort, and collection arrangement and access. The following changes were being proposed and were therefore included: a personalized selective dissemination of information, stopping circulation of recent journals, and increased use of microfilm. Additional user recommendations were also desired.

Around this was built the survey questionnaire. The questionnaire was pretested on four Bristol employees prior to being used on the actual sample population (results of these pretests were *not* included for the final data analysis).

The second step was to delineate the potential user population of the library and to choose a sample from it. Lacking an organizational chart, all the departments at Bristol were listed (with per-

sonnel) using the company phone book. This list was narrowed to departments which were potential users (i.e., not necessarily heavy users) by consultation with the library staff. The total population numbered approximately two hundred and thirty and from this thirty-two (14%) were chosen. To determine if this was large enough to be representative, the sample was randomly split in half (after the data were collected). The answers of the two groups to the question of frequency of library use were compared. The answers of the groups corresponded closely and this agreement was used to verify that the sample was of adequate size.

The thirty-two people in the sample were from twenty-one departments. Where available, the director of the department was always chosen and in departments with more than ten people, additional people were randomly chosen to give a 14% sample size. (In three departments the director was unavailable and therefore a replacement was randomly chosen from that department.)

The department heads were sent a memo as an advanced notice. All thirty-two users were then contacted by telephone (using a standardized introduction) to set up a convenient time for the interview. In both the memo and the telephone contact, effort was made to disassociate the survey from the library by appearing to be an outside observer—to eliminate any "halo" effect (2). Also, in both of these contacts, the approval of the upper management was stressed. In the standardized introduction at the time of the interview, confidentiality was assured. The interviews were conducted in the interviewees' office or work area and were easily completed in the promised twenty-minute period. All thirty-two interviews were completed by the author within a twenty-one day period in March 1974.

The data from the interviews were hand coded; coding of most of the open-ended questions was done through content analysis. The data were stored in the IBM 370 computer at Syracuse University. For each question, simple per-

centages were computed and correlations were computed for certain responses. All analysis used programs developed by the author.

Data Analysis

The primary data for this analysis are presented in Table 1. The total sample opinion is in the consensus column (total population = thirty-two). The other three columns represent subgroups of the total sample. Directors (total = eighteen) and non-directors (total = fourteen) subgroups were chosen to reveal any differences in their opinions concerning the library due to the position in the company. In the third group were those who had written a published literature review (answers from this subgroup were also part of the director/non-director split). Review writers (total = nine) were chosen as the most information conscious group and their opinions were compared to the others to reveal any differences due to degree of information awareness.

Significant differences between directors and non-directors were revealed in many responses. In use of the library (see Table 2), 66% of the directors used the library frequently compared to 50% of the non-directors. Concerning their pattern of use (Table 3), 39% of the directors usually visit the library personally compared with 70% of the non-directors. Again on their pattern of use (Table 3), 25% of the directors usually send a memo compared with 16% of the non-directors. On their reason for use of the library (Table 4), 44% of the directors use it for keeping up on current information compared with 21% for non-directors. This director/non-director split has serious implications for the library and is *the* most important finding.

Monthly bibliographies are produced through periodical scanning by the information services department and are a large undertaking of this department. In the consensus column of Table 1, the monthly bibliographies were useful to 93% of those who regularly look at them. Of the total sample, however, 25%

Table 1. Evaluation of Library Services and Facilities by the Whole Sample and Three Subgroups

The symbols indicate the trend of the response with (+) meaning favorable, (—) meaning unfavorable and (0) meaning an equally divided response. Also given are the total number who responded to the question and the percentage of these responding in the indicated manner. For example, in the first box, 15 people responded to the question on usefulness of the monthly bibliographies and 93% of these were favorable.

| Service or Facility | Consensus (32) | Director (18) | Non-Director (14) | Review Writer (9) |
|---|-------------------|------------------|----------------------|-------------------------|
| Monthly Bibliography—useful | 93% + 15 | 88% + 9 | 100% + 6 | 100% + 4 |
| Computer Services—useful | 71% + 14 | 82% + 11 | 66% — 3 | 100% + 9 |
| Book Collection—combining unsatisfactory and adequate | 69% — 26 | 63% — 16 | 80% — 10 | 75% — 8 |
| Library Journal Collection | 69% + 32 | 76% + 18 | 57% + 14 | 67% + 9 |
| Library Journals—circulate | 53% 0 31 | 58% + 17 | 57% — 14 | 50% 0 8 |
| Microform | 73% + 15 | 57% + 7 | 87% + 8 | 50% 0 4 |
| S D I | 72% — 32 | 72% — 18 | 71% — 14 | 67% — 9 |
| Library Seating and Comfort | 56% + 25 | 60% + 13 | 50% 0 12 | 80% + 5 |

Table 2. Frequency of Use of the Library by the Whole Sample and Director/Non-Director Subgroups

| Use of Library | Consensus | Director | Non-Director |
|----------------|-----------|----------|--------------|
| Frequently | 19 (60%) | 12 (66%) | 7 (50%) |
| Occasionally | 11 (34%) | 6 (34%) | 5 (36%) |
| Seldom | 2 (6%) | 0 | 2 (14%) |

Table 3. Pattern of Use of the Library by the Whole Sample and Director/Non-Director Subgroups

| Pattern of Use | Consensus | Director | Non-Director |
|-------------------|-----------|----------|--------------|
| Visit Personally | 17 (53%) | 7 (39%) | 10 (70%) |
| Send Someone Else | 3 (9%) | 2 (16%) | 1 (7%) |
| Telephone | 4 (13%) | 3 (13%) | 1 (7%) |
| Send Memo | 8 (25%) | 6 (25%) | 2 (16%) |

had never seen them; and another 22% know they exist, but do not regularly look at them.

Of the people who regularly look at the monthly bibliographies (fifteen peo-

ple), 73% use them for keeping up on current information, while 20% use them as a check against their other current information sources. All (100%) of the non-directors who regularly use the

Table 4. Reason for Use of the Library by the Whole Sample and Director/Non-Director Subgroups

| Reason for Use of Library | Consensus | Director | Non-Director |
|-------------------------------|-----------|----------|--------------|
| Work in quiet place | 0 | 0 | 0 |
| Literature search | 1 (3%) | 0 | 1 (7%) |
| Keep up on current literature | 11 (34%) | 8 (44%) | 3 (21%) |
| Get answer to ques. | 13 (41%) | 8 (44%) | 5 (36%) |
| Obtain citation | 7 (22%) | 2 (12%) | 5 (36%) |

• •

bibliographies, use them for keeping up on current literature. Only 56% of the directors and 50% of the review writers use them for that purpose. The bibliographies appear to be most useful to non-directors.

Various on-line commercial data bases (e.g., Medline, Toxline, etc.) are available through the library. Awareness of these services was moderately high. However, 31% of the total sample was completely unaware that any computer services were available. Of those who had received output from at least one of these data bases (eighteen people), 71% rated them good to very good. By looking across the computer services row of Table 1, the opinions of the directors and non-directors differ strongly. As a group, 66% of the non-directors (who used one of the data bases) had negative comments concerning their usefulness as opposed to positive feelings by 82% of the directors and 100% of the review writers. Again the striking point is the portion of people who were totally unaware of the computer information services available.

The book collection was relatively small in relation to the journal collection. It was evaluated as unsatisfactory by 19% and only adequate by 50% of those who use it. Thus as Table 1 shows, the book collection received a 69% negative response. The director, non-director,

and review writer subsets did not differ significantly from this general finding. Since the library is a research library and not oriented toward books, this apparent dissatisfaction is not serious. Arrangement and access to the collection are another matter. Of those who have searched for a book in the library (i.e., twenty-four people), 54% required assistance to find it. While only 12% of the total sample reported having difficulty using the card catalog, the need for an improved subject catalog was the most frequently mentioned recommendation for change in the library (five times).

Table 1 shows that the journal collection was rated favorably by all the groups. Breaking down the 69% in the consensus column, the journal collection was viewed as good by 47%, very good by 13%, and excellent by 9% of the total sample. Director, non-director, and review writer subsets did not differ greatly from this finding. On the question of the circulation of journals, 50% were for and 46% were against (one person had no opinion). Only eight journals were mentioned as being personally subscribed to which the library did not hold and each was mentioned by only one individual.

The staff consisted of five professionals and three clerical and was mentioned in various ways in the open-ended questions for what should be changed and what should remain the same. Library cooperation was the most frequently mentioned point to be left unchanged (seven times). Allied to this were comments about the good service (three times) and capable personnel (two times). Opposed to this were recommendations for changes which suggested more people to get literature searches done more quickly (three times) and the staff might develop an increased ability to do chemical searches (two times).

Microform (e.g., microfilm, microfiche, etc.) was available in the library only in a very limited number of items. Only 46% of the sample had ever used microform anywhere. Of those who had used it (fifteen people), Table 1 shows a favorable response by 73%. Director, non-

director, and review writer subsets vary slightly from this.

The need for a proposed personalized selective dissemination of information (SDI) service was rejected by 72% of the sample (Table 1). The main reason (38%) was that interests were too broad and changing to allow this to be done. Also mentioned was the need for personal contact with the literature by 6% while 28% said that their present method of keeping up with current literature was fulfilling their needs. Director, non-director, and review writer subsets did not differ from these findings.

The average number of books in each office of the respondents was 63. On the average, 79% (by the respondent's estimates) were bought by the company as opposed to personal copies. Whether the company owned books (approximately 1575) were departmental or library copies was not determined making these findings of no value for library planning. In the course of this study, the existence of five departmental mini-libraries was determined.

In the open-ended question concerning changes, two people mentioned the need for more coverage by the library of the technical/production aspects of Bristol's work.

Comfort in the library (Table 1) was rated as good to excellent by 56% of those who responded to this question (25 people). A few isolated comments recommended the following: More room, more private study spaces, more ashtrays and a visitor's coat rack.

An attempt was made to determine the user's overall attitude toward the library. From the previously mentioned comments about the library staff and its attitude, the library is viewed as a useful part of the research division. Yet, on the SDI question, remarks indicate that the user did not want to burden the library with such a task. Also, 37% of the people who had recently done a literature search chose to do it themselves. These findings suggest that the users view the library as a place which should not be expected to actively assist in information gathering.

Summary and Recommendations

1) Directors and non-directors are two distinct groups in the Bristol Laboratory library user population. The library must decide its position on the director/non-director dichotomy. Although no formal policy exists at present, the difference in the manner in which directors and non-directors use the library indicates that directors receive different treatment. Should special programs be developed to fit the needs of each group? One possible decision could be to expand services treating everyone equally and providing such services as literature searches, memo requests for photocopies and others to non-directors.

2) To be worth the effort, the monthly bibliographies must be more fully utilized by the users. They must present new information, that is, information not known previously from other sources. To do this the scope of coverage and speed with which items appear should be increased. Moreover, this service should be better known to increase its utilization.

3) The computer information retrieval services available are found useful by all groups except non-directors. In the non-director group, however, only 3 of 14 people had used any of the available services. The main problem is the percentage of people totally unaware of their existence. The users should be made aware of what retrieval services are available and what the coverage is of each. This advertising could be by way of a company memo and/or through library presentations at departmental or divisional meetings.

4) The library's book collection is viewed as lacking by the majority but this is not serious due to the journal orientation of the library's users. Implementation of an understandable shelf arrangement and comprehensive subject catalog should have high priority.

5) The library's journal collection was rated as good, very good or excellent by the majority of the sample and does not appear to be a source of dissatisfaction. There was almost an exact split on whether journals should circulate or not.

6) Existing personnel were commended highly for the job they were doing. However, the professional staff should be increased to implement new programs and to fill the stated need for faster literature searches and capability for chemical searches.

7) Microform had not been used by the majority of the sample. User reaction to an increased use of microform in the library thus cannot be predicted.

8) Selective dissemination of information was rejected by the majority of all groups examined and should not be attempted under the present conditions.

9) Departmental mini-libraries existed in five departments. The collections represent an untapped resource of the library. To increase the usefulness of these collections, the library should examine them and add any unique items to its card catalog. Further, the library could assist the departments in organizing the collections if they so desire.

10) An increase in coverage of the production/technical aspects of the company should be considered. An attempt could be made to serve this area by addition of appropriate materials and possibly a separate periodic bibliography.

11) Comfort of the library was rated as good to excellent by most of the sample and needs no major changes.

12) The fact that over one-third of the persons who had recently completed a literature search did it themselves indicated that the users view the library as a passive information source. This conclusion is supported by SDI comments about not wanting to burden the library. The people sampled seemed to view the library as a passive source. The library must decide if it agrees with this view. If not, then it should begin to change it by more fully serving its user population.

Acknowledgment

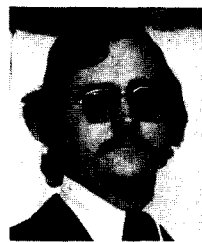
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Jerome P. Fatcheric is an assistant librarian at AMP, Inc., Harrisburg, Pa.

Techniques for Educating SDI Users

Hilary D. Burton

U.S. Department of Agriculture, Agricultural Research Service,
Beltsville, Md. 20705

■ During the past three years a large-scale selective dissemination of information (SDI) system has been implemented within the U.S. Department of Agriculture. The system is user-dependent in that search profiles are written and revised by the user-scientist personally. In the course of training more than one thousand users to utilize several vari-

ously structured data bases, certain techniques were developed by the author. A review of the approach used, the rationale for its selection, and the various techniques developed will be presented as well as a résumé of the problems encountered—both on the bureaucratic and individual level.

THE GENERAL reaction from people in the information handling field on hearing a description of the SDI system which is operated within the U.S. Department of Agriculture is skepticism. Either they assume that the system is very young and therefore the analyses* of it are premature since the system will likely change if not collapse; or they assume that it has not been fully described—that details have been omitted which would explain how a large scale (1300 users, 10,000 profiles) SDI system has been operated relying almost completely on users to initiate and revise their profiles.

These questions can be relegated to three broad categories: how to get potential users to attend training seminars, how to get them to write profiles, how to get them to do the necessary follow-up such as revising profiles which retrieve too little or too much, to change profiles or write new ones when their research projects change, etc.

The Staff's Role

Each of these aspects is important, but throughout the initial planning of the SDI system, its implementation, and its current operation and expansion, the emphasis has been on establishing personal contact between the individuals served and someone within the information system staff. One of the main reasons behind this approach was purely economic. The system is operated with a rather small staff and 90% of all user

* Numerous inquiries were received by the author after publication of an earlier paper describing this overall system: "A User-Dependent SDI System." *Special Libraries* 64(12): 541-544 (Dec 1973).

training—whether by training seminars, phone calls, or written discussions—is by one individual. Obviously, problems can arise when this individual is not available. Therefore, two steps have been taken to alleviate the bottlenecks which occur.

First, two individuals on the general systems analysis staff, neither of whom is a trained information specialist nor works full time on the SDI system, have been briefed on answering certain kinds of questions. They can field most of the incoming questions or at least reassure the inquirer that the problem will be dealt with promptly. Second, in scheduling travel to field locations, meetings, etc., the head analyst makes it a rule never to be out of the office more than a week. For every week out, there will generally accumulate two or three work days worth of profile changes, new profiles, profile inquiries, or general operating system questions. Another reason for the week limit is that one cannot give a training seminar more than three times in one week without becoming less than enthusiastic about the subject.

Another reason for emphasizing that there are real people involved in the system and maintaining continuity in the personnel with whom the users deal is that it alleviates the alienation felt by many who have been frustrated by computer systems.

In addition to the favorable reaction the users have expressed to this emphasis that real people are involved in the system, the context or environment of the system also lends itself to creating enthusiasm among the users. Many USDA scientists are working in remote field locations with limited or no library facilities readily available. That the staff would take the time to travel to visit them is appreciated; but even more important, they are receiving easy access to relevant research throughout the world. Knowing that management within most of USDA feels that the service is worthwhile enough to fund directly out of overhead impresses the scientists. Certainly, they appreciate not getting billed directly. Moreover, they realize that

someone is paying for the system and if they do not use it, the service is not being fully utilized.

The Seminar

These are the major reasons which have contributed to the initial user enthusiasm. Motivating them actually to develop and revise profiles is accomplished by several other means. First, the explanation of the system is as simple as possible. Many persons do not yet realize that any activity a computer can execute must be capable of being broken down into specific detail—detail that almost any averagely intelligent individual can understand. Second, almost any type of literature search is basically a translation process, i.e., translating from the user's need expressed in his own vocabulary through any intermediary vocabularies and finally into the language of the data base. Explained in these terms, many researchers readily grasp the procedures necessary for effective searching.

Before dealing with these translations specifics, however, the coverage and composition of the hard copy equivalent of the data bases available are described. Without this introductory explanation, it is virtually impossible to educate the users to write satisfactory profiles. Few scientists know how to make effective use of the secondary journals. This ignorance is not due to any inherent shortcomings on their part; rather it is because no one has taken the time to explain the tools. The staff explains these tools to the users and proceeds from there to show how to break down the various conceptual steps involved in searching to a level of detail acceptable to the computer.

The specific kinds of detail required will necessarily depend on the software or computer search programs being used. In general, term type—such as whether an item is a keyword, an author's name, a journal coden, a classification code, a thesaurus heading, etc.—and the logic between terms expressed by Boolean operators must be spelled out in any system. It is explained to the user that each

citation is broken down into units and that each unit has a name (term type). The various data bases do not all carry the same units, but where like units occur they will be named similarly. For example, the identifying tag for author's name is the same for all data bases. The user is referred to the "User's Guide" for a list of the term types—their definition and identifying tags—which occur in each data base. The translation process becomes readily apparent to the user when he finds that in *Biological Abstracts* there is a single classification/subject code for chemical control in the field of entomology, but to search *Chemical Abstracts* for the same subject he must use specific keywords which fully spell out his interest. He is translating his subject request into two different vocabularies.

Various approaches such as slides and charts have been used. However, when dealing with groups of fewer than 100 scientists, a live talk, using real examples and a blackboard, seems more effective. A simple example, stated as a question, is first presented. It is then broken into concepts, each concept is elaborated, and coded. Following this, elaborations are added to the example—embellishments such as classification codes, authors or journals to be excluded, etc. At any point in the discussion, the audience may break in with questions.

The "User's Guide," which is distributed to all seminar attendees, as well as to potential users through the mail, incorporates the same approach but in more detail. Wherever possible the various reference or self-help tools available from the secondary publishers are incorporated in the guide. For instance, the *Engineering Index Card-A-Lert* codes which may be used in a profile are included, as well as the COSATI codes used by NTIS, and subject codes used by *Food Science and Technology Abstracts*. A full citation is given for material too lengthy for inclusion, identifying where it can be obtained, and the price, if any. Thus, copies of *Biological Abstracts'* cross (i.e., subject) and taxonomic codes are made available.

The Profile

Profile forms—the forms on which the search profile is actually submitted—are as self-explanatory as possible. For example, the Boolean operators are printed on the page for ready reference; also included are the names of the available data bases and the codes which should be used when a user wants to search them.

Throughout the training seminars, simplicity of explanation is attempted. After the general or group presentation, individuals are free, indeed encouraged, to ask as specific questions as they wish. Often, users who feel their questions are foolish will wait until after the session to ask them to avoid possible embarrassment. This is the point where the individuals usually begin actually to work out their questions and fill out the profile forms.

Once a profile is developed, however, the user's job is not finished. In explaining how to use the SDI system, users are urged to revise their profiles as many times as they feel necessary to obtain satisfactory output. Obviously there is a wide range in the amount of "noise" an individual will tolerate. No limits are established—the user is simply encouraged to aim at retrieving adequate output. If he reaches a point where he cannot determine why he is having trouble, but he knows he is not getting what he wants, he can call or write. In few cases are there disgruntled users who have made no attempt to revise their profiles or who have not at least contacted the staff. It is pointed out to these "noncommunicators," however, that the success of the system rests on them. And they must take the initial step at least to indicate their dissatisfaction.

Periodically, in the case of disasters like erroneous tapes or hardware failures, or when system changes or expansions occur, letters of explanation are enclosed with the search output. These memos also serve to reassure the users that the staff still exists and that the machines have not taken over. Every eight or ten months a questionnaire is sent

A Faceted Classification for Occupational Safety and Health

Karen Coyle

University of California, School of Librarianship, Berkeley, Calif. 94704

■ The CIS classification of occupational safety and health materials was devised and used by the Occupational Safety & Health Information Centre of the International Labor Organization. The ar-

ticle discusses the faceted classification theory of Brian Campbell Vickery as the basis of the CIS scheme and then describes the CIS scheme and its use as an information retrieval tool.

WITH the increase in specialization of research there has been a great increase in special libraries and with that an increase in the need for special classification and information retrieval systems. One such special system is that devised by the Centre International d'Informations de Sécurité et d'Hygiène du Travail of the Bureau International du Travail for use in their library of materials on the subject of occupational safety and health. This scheme is interesting not only because it focuses on a restricted topic and therefore is highly intensive, but also because it uses a different form of classification, faceted classification, instead of enumerative classification, with which we are generally more familiar.

Many librarians have had little contact with faceted classification schemes beyond a brief knowledge of Ranganathan's Colon Classification. The Classification Research Group in England has continued to develop the theory of faceted classification since they began

meeting in 1952. In 1960, Brian Campbell Vickery published his explanation of faceted classification and how it can be constructed (*1*). It is on the basis of Vickery's work that the CIS developed their scheme (hereafter referred to in this article simply as "CIS").

Faceted Classification

Faceted classification is quite different from enumerative classifications such as Dewey Decimal or Library of Congress. An enumerative classification gives a consecutive, linear arrangement of subjects based on the linearity of shelf arrangement of books for which the classification serves. Each subject has its fixed position in the classification scheme based on a certain sub-division of classes moving from general to specific. The document classified is given one position in this arrangement which best describes the subject matter of the document and which determines where it will sit on the shelf. When Melvil Dewey devised his decimal classification, he intended that subject retrieval be through the use of the classified catalog which was a reproduction of the order of the classification schedules. But being able to give each document only one classification

Karen Coyle was a student at the University of California, Berkeley. She is presently residing in Italy.

number was considered to be too limiting for effective subject retrieval and led to the development of subject catalogs with larger access to the books. Today in the United States, verbal subject catalogs have replaced the shelf list as means of subject access to classified materials, and the classification number, though it keeps getting longer, serves mainly as a shelf-location symbol.

Faceted classification is an attempt to make classification more equal to subject description, with a de-emphasis of linear arrangement of books on shelves. The schedules of a faceted classification consist of groups of individual terms which have been derived from a division of the general subject into aspects or parts. These aspects are divided into facets which are homogeneous sets of terms having the same relationship to the major subject under analysis. The classifier combines a number of these terms to construct the subject description. How complex a subject description can be devised by this classification and what kind of relationships are expressed in the full description depends on how the faceted scheme has been devised. Some schemes are made up of "rigidly combining facets" which can only appear in conjunction with certain other facets or even all other facets in the scheme. Other schemes are "freely combining" and any facet can be used with any other, depending on what is necessary for the subject description.

Faceted Classification and Special Libraries

Though the first major faceted classification, Ranganathan's Colon Classification, is a universal classification, faceted classification seems to be especially conducive to use in special libraries in the technical or scientific fields. Libraries in these areas need a highly intensive subject classification which can be modified frequently without requiring the reclassification of parts of the existing collection.

A faceted classification can be intensive for a highly complex subject with-

out having long, bulky schedules. Although an enumerative scheme must list every possible complex subject, the faceted system provides lists of the parts or aspects which make up these complex topics, which are many fewer than their possible number of combinations. The faceted classification scheme will probably need less revision than an enumerative scheme because the schedules have not had to predict all possible subjects and present no scheme of subjects but merely the elements of which subjects can be composed. "New" subjects using available terms have no effect whatsoever on the classification system. The only revision necessary is to add new terms as needed. The new terms are placed in the proper facet to be used in combination with other facets just as the terms placed there earlier. The hospitality of a faceted classification as described by Vickery depends mainly on the notation, for the facets themselves, if they are truly homogeneous and mutually exclusive, are infinitely hospitable.

CIS

The CIS faceted classification (2) is based on five major aspects of occupational safety and health: occupational hazards, consequences of those hazards, techniques of investigation, protective and remedial measures, and place of occurrence. From these are derived the schedules of facets in the following way: (the letters indicate the notational symbols assigned to each facet)

1. Occupational hazards
 - Physical agents and phenomena (B)
 - Substances (C-G)
 - Inorganic chemicals (C)
 - Organic chemicals (D)
 - Natural products and industrial substances (F, G)
 - Premises, equipment, operations and processes (H, J)
 - Types of work and industrial organization (K)
2. Consequences
 - Fires and explosions (L)
 - Pathology (M, N)

3. Investigative techniques
 - Physiology and psychology (P)
 - Methods of measurement, examination and investigation (Q)
4. Protective and remedial measures
 - Medical prevention and treatment (R)
 - Safety and health engineering (S)
 - Personal protective equipment (T)
 - Safety and health organization (V)
5. Place of occurrence
 - Groups of persons (W)
 - Industries (X)

There is also a facet for "General Special" topics (Y) and one for general occupational safety and health (Z). Following this is a series of common subdivisions and form divisions which are separated from the regular facets by the symbol (:), plus a list of geographical designations and international organizations which are given numerical codes.

The order of the facets, which is also maintained in the schedules of terms, is specific-to-general. This is a more helpful order to the researcher in this topic.

CIS is a "freely combining" scheme, all facets being appropriate for use with all others without any restriction on the number to be used.

The notation in CIS is assigned to facets as needed by the amount of terms to be found in the facet and is not intended to reflect the structure of the scheme. Each term receives a three- or four-letter code, the first of which is a capital letter, and indicates which facet group the term belongs to. Only consonants have been used as capital letters and an attempt was made to alternate consonants and vowels in the codes to make the codes easier to write and remember. Hospitality in the schedules is achieved by spaces left in the notation and by the fact that each code is filed separately letter-by-letter so that adding a fourth letter to a three-letter code works like adding a number to the right of the decimal point in Decimal Classification.

The filing order is the same as the order of the schedules, being alphabetical, and therefore the catalog maintains the

specific-to-general order. The filing order remains purely alphabetical even if there are many unused facets, e.g.:

Fsb Gtz Mpsz Pey Xdy
 Fsb Gtz Mpsz Skz
 Fsb Gtz Mpsz Xdy
 ...
 Fsb Xdy

Subject Retrieval in CIS

Subject retrieval in the CIS system requires the use of two tools: the classified card catalog, in which each document with its full classification is represented once filed by its code; and the "alphabetical chain index" (3). The latter is an index to the combinations of terms which have been used by the library. The CIS supplies this index to users of their library, but a library doing its own classification with this scheme would devise an index to its own card catalog. This index gives a user access to a document through any of the facets in its classification code. Each facet in a code appears under its verbal equivalent; in this way, the index serves also as a thesaurus to the symbols.

To reduce the number of items in the chain index, each facet is listed only with those that precede it alphabetically in the code. Once the user has the preceding facet codes, he can find the full code in the card catalog. For example, a person looking for information on pneumoconiosis in the mining industry begins his search with the word "mining." In the chain index he finds "Mining" followed by an alphabetical listing of facets, which have appeared in combination with it, with the codes listed to the left of the verbal headings. Moving down the list one finds: Pneumoconiosis: Dust: Silica, quartz (Fsb Gtz Mpsz Xdy). Had the user begun his search under the heading "Pneumoconiosis," he would have found this same document or heading listed as: Dust: Silica, quartz (Fsb Gtz Mpsz). To know then if this appears in specific reference to the mining industry he would have to look in the card catalog under Fsb Gtz Mpsz and follow the alphabetical progression of the codes

until he reaches Fsb Gtz Mpz Xdy. Looking under "Silica" he would find listed the facet Fsb only with those facets which precede it in other codes, indicating subjects which would be too specific or irrelevant to his needs. This way he would know that his search in the catalog is best begun with Fsb rather than with earlier facets.

The most effective search in this system obviously begins with the facet which appears latest in the alphabet, and for this the user needs a minimal knowledge of the arrangement of the classification scheme. The user needing information on a topic which appears in one of the earliest facets can begin his search in the card catalog, but a glance at the chain index is always recommended to make sure that one is not overlooking a needed document.

For intensive research of the type expected of the users of a special library, shelf browsing in a general sense is considered less important than the research value of a classification scheme such as CIS. The specific-to-general order of the facets and the faceted structure of the codes makes a shelf order which would be indicative of subject matter in a useful manner impossible. This is compounded by the fact that much of the material in occupational safety and health is in the form of articles and pamphlets.

Classifying with CIS

The special library using this classification scheme for its own materials will find that there is much flexibility in the intensity of classification and the emphasis which one can achieve. This means that a library can adapt this scheme to its users' particular needs.

Because this scheme does not have a rigid structure, special care must be taken in classifying to be consistent. It is best to decide what kind of access to the materials will be of greatest use to the library patron, and develop from this a firm classification policy. Using CIS one can describe the specific subject of the document as well as use ge-

neric facets to aid those users who need a broad survey of the subject matter. However, this means having a clear statement of the relation between the generic and specific terms in CIS and using these facets in a consistent manner throughout the catalog.

It is also necessary to have some limit on the number of facets to be used to describe each document, and a policy to guide the cataloger in deciding which facets can be eliminated when necessary to reduce the length of the notation.

Present History

This classification system was used from 1960 to 1973 by the CIS organization to classify some 30,000 documents. In 1974 CIS began handling this material by computer and no longer classifies using this system. However, the materials classified prior to 1974 are still being retrieved by use of the card catalog and the Alphabetical Chain Index of the CIS.

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Karen Coyle is currently continuing her research in classification and information retrieval.

Bibliographic Control Among Geoscience Abstracting and Indexing Services

Bahaa El-Hadidy

University of Pittsburgh, Hillman Library, Pittsburgh, Pa.

■ The degree to which the present indexing and abstracting services duplicate information and overlap coverage is investigated by studying the coverage of a sample of the geochemical literature by *Chemical Abstracts* and by other major services in the geosciences. Results indicate that 15% of the sample is not covered by any of the secondary services

consulted. Forty-two percent of the remaining references are covered by two, three, or four services. Greater cooperation and coordination among the services to assure document availability and better bibliographic control are necessary. Suggestions for future action and application of new machine methods are discussed.

IN 1969 the Committee on Scientific and Technical Communication reported that "the growth in the number of abstracting and indexing services in science and technology has been spectacular" (1). The report indicated that in 1900, there was one abstracting service for every 46 primary journals in the United States; by 1930, the ratio was 1 to 24; and by 1950, 1 to 18. Such services have also experienced a tremendous growth in the volume of items cited in them. The number of abstracts published in *Chemical Abstracts* alone has increased from 101,027 in 1957 to more than 240,000 in 1967, and it is expected to reach the 400,000 mark by 1974 (2). The continuous increase in the volume of the literature and the dynamic change in its character have strained the capabilities of these services and have created a crisis of under-organization and lack of control. Overlap in mission, in coverage,

and in processing, plus other system problems, have been frequently reported in the literature.

One of the factors that had great effect on the lack of bibliographic control among the abstracting services has been the rise of interdisciplinary sciences. The interdisciplinary sciences with their high subject dispersion and the scattering of literature throughout a large number of publications pose a great difficulty to the abstracting services in covering such fields. The extent of duplication and overlap in the coverage of the geochemical literature by *Chemical Abstracts* and some major services in geosciences will be discussed.

The Coverage, Duplication and Overlap of Geochemical Literature

Methodology: In selecting the sample, a method by which Aslib Research Department has investigated the possible loss of information occurring between primary publication and abstraction was adopted (3). The method is based on the assumption that a comprehensive bibliography of a particular subject is taken as representing the total volume of pub-

Dr. Bahaa El-Hadidy was with the Hillman Library, University of Pittsburgh, Pittsburgh, Pa. He is now assistant professor, Graduate Department of Library Science, The Catholic University of America, Washington, D.C.

Table 1. Sample of References Taken from Different Sources

| Source of Sample | Total No. References in Source | Number of References in Sample (1960-1966) |
|--|--------------------------------|--|
| Bibliography on Chemical Products of Volcanism | 1280 100% | 615 48% |
| Geochemistry of Porphyryns | 219 100% | 75 34% |
| Geochronology | 75 100% | 60 80% |
| Meteorite Investigation by Microprobe | 63 100% | 55 87% |
| Chemistry of Sed. Rocks | 397 100% | 74 18% |
| Total | 2282 100% | 879 38% |

• •

lished literature on the subject during the period it covers. Since a comprehensive bibliography in a wide field such as geochemistry is difficult to compile, a modification of this method was necessary. The modified method consists of selecting a comprehensive bibliography covering the published literature on a small, defined topic in geochemistry, supplemented with some selective bibliographies published with some reviews and research articles on other specific topics of geochemistry.

A list of the selected bibliographies is given at the end of the paper.

The sample references were then searched via the author indexes of the appropriate abstracting and indexing journals to determine the number of references covered by each service. In order to reduce the labor of searching the secondary journals, it was decided to confine the sample to those references published between 1960 and 1966 and cited in the selected bibliographies. The number of references in the selected bibliographies for the period is in Table 1.

In determining the coverage of the sample references, the following secondary journals were searched:

1. *Chemical Abstracts* (CA) Collective Indexes, 1957-1961, 1962-1966, and 1967-1971.

2. *Bibliography of North American Geology* (BNAG), volumes covering the published literature of the years 1960 to 1967.
3. *Bibliography and Index of Geology Exclusive of North America* (IGENA), v. 25-31 (the volumes covering the published literature of the years 1960 to 1967).
4. *GeoScience Abstracts* (GSA), v. 2-8, 1960-1966. (*GeoScience Abstracts* ceased publication at the end of 1966.)

In order to determine the duplication in the coverage of the sample, the number of incidents where two, three, or more services covered the same document were counted. From these data, the percentages of documents covered by one, two, or more services were determined.

The overlap in coverage was determined by identifying the references covered twice by each two services. This was repeated alternatively for all services consulted. The percentage of the number of references covered twice by two services to the number of references covered by each of them determined the extent of overlap between these two services. In determining the overlap *Bibliography of North American Geology* and *Index of Geology Exclusive of North America* were considered one service since they are designed to complete each other. However, the overlap between these two services was also determined in order to get a complete picture.

Results: The findings relative to the coverage of the sample references from different sources by the selected secondary services are given in Figure 1.

The results of duplication in coverage of the sample references are given in Figure 2.

Table 2 gives the results of overlap in coverage of the sample references by the different services.

The results show that of the 879 references in the sample: 135 (15%) were not covered by any of the secondary journals consulted; 560 (64%) were covered by *Chemical Abstracts*; 220 (25%)

Figure 1. Coverage of Sample of References by Abstracting Services. Total Number of References in Sample is 879

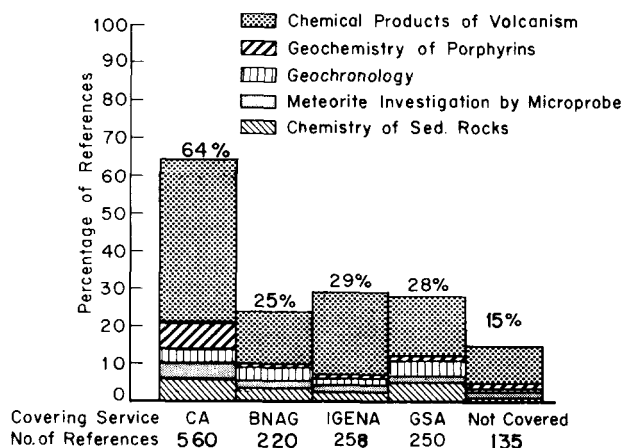
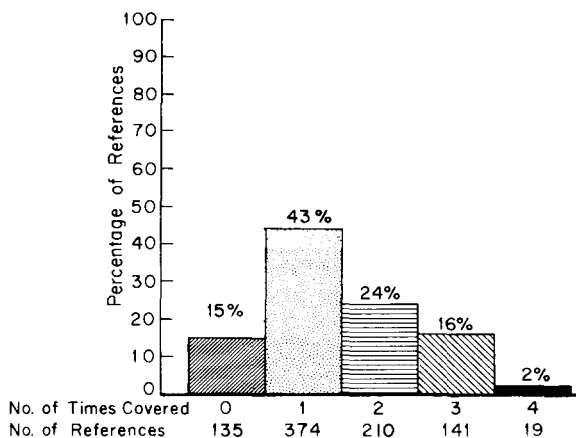


Figure 2. Duplication of Coverage of Sample of References by Abstracting Services. Total Number of References in Sample is 879



were covered by *Bibliography of North American Geology*; 258 (29%) were covered by *Bibliography* and *Index of Geology Exclusive of North America*; 250 (28%) were covered by *GeoScience Abstracts*.

Conclusion: In studying the coverage of the geochemical literature by some of the secondary services, one finds the following:

▲ A research worker in the field will find that the literature is mainly covered by the major services in both chemistry and earth sciences. However, he will

probably find that none of these services adequately covers his field, and he might have to consult three or four services to get satisfactory results. At present, *Chemical Abstracts* is one of the better tools for searching the literature.

▲ In addition to considerable time lag in publishing some of the indexes, a geochemist may find that about 15% of the literature that might be of interest to him is not covered by any of the secondary services.

▲ In searching the literature, a geochemist may find that more than 42% of the references are covered more than one

Table 2. Overlap in Coverage of Sample of References by Different Services

| Source of Sample | CA‡ (BNAG or IGENA) | BNAG or IGENA (CA) | CA (GSA) | GSA (CA) |
|--|-------------------------|-------------------------|-------------------------|-------------------------|
| Chemical Products of Volcanism | 367 (199)* | 328 (199) | 367 (108) | 144 (108) |
| Geochemistry of Porphyryns | 65 (12) | 14 (12) | 59 (8) | 10 (8) |
| Geochronology | 35 (29) | 53 (29) | 35 (23) | 32 (23) |
| Meteorite Investigation by Microprobe | 44 (22) | 28 (22) | 44 (12) | 14 (12) |
| Chemistry of Sed. Rocks | 49 (35) | 54 (35) | 49 (36) | 50 (48) |
| Total | 560 (297) 100% (53%) | 477 (297) 100% (62%) | 554 (187) 100% (34%) | 250 (187) 100% (75%) |

* Indicates that out of 367 references covered by CA (199) references have been also covered by (BNAG or IGENA), i.e., the figures in parentheses represent the instances where each of the services at the top of the column covered the same paper. Figures on the left of parentheses represent the number of references covered by services at the first line of the top of the column.

| Source of Sample | BNAG or IGENA‡ (GSA) | GSA (BNAG or IGENA) | BNAG (IGENA) | IGENA (BNAG) |
|--|-------------------------|-------------------------|------------------------|------------------------|
| Chemical Products of Volcanism | 328 (109)† | 144 (109) | 127 (28) | 202 (28) |
| Geochemistry of Porphyryns | 14 (8) | 10 (14) | 7 (2) | 7 (2) |
| Geochronology | 53 (28) | 32 (28) | 38 (7) | 15 (7) |
| Meteorite Investigation by Microprobe | 28 (13) | 14 (13) | 17 (8) | 9 (8) |
| Chemistry of Sed. Rocks | 54 (39) | 50 (39) | 30 (2) | 24 (2) |
| Total | 477 (197) 100% (41%) | 250 (197) 100% (79%) | 219 (47) 100% (22%) | 257 (47) 100% (18%) |

† Indicates that out of 328 references covered by BNAG-IGENA, (109) references have also been covered by (GSA), i.e., the figures in parentheses represent the instances where each of the services at the top of the column covered the same paper. Figures on the left of parentheses represent the number of references covered by services at the first line of the top of the column.

‡ CA = Chemical Abstracts
BNAG = Bibliography of North American Geology
IGENA = Index of Geology Exclusive of North America
GSA = GeoScience Abstracts

time, with some being covered as many times as the number of services consulted.

▲ Considerable overlap exists in covering the geochemical literature by secondary services in chemistry and geology. A geochemist consulting both *CA* and

Abstracts of North American Geology-Index of Geology Exclusive of North America may find that 62% or more of the references covered by the last two services are also abstracted in the first one. He also finds that 79% of the references covered by *GeoScience Abstracts*

are also covered by *Bibliography of North American Geology* and *Index of Geology Exclusive of North America*.

Suggestions and Considerations for Future Planning

With the rising demands for making useful information easily and quickly available, there is an obvious need to improve the present system of bibliographic access to knowledge. In an attempt to do so, a study by the Heller Associates (4) in 1963 called attention to the relationship which might be created between the discipline-oriented services and the mission-oriented services. The study suggested that because discipline-oriented services have the objective of continual and complete coverage of scientific and technical literature, they offer a sound base for improving the overall system. By eliminating unnecessary duplication of efforts, developing cooperative procedures, and upgrading the services so that world-wide literature is comprehensively covered, it is possible to re-package reference material for project-oriented interdisciplinary service. The underlying concept is that a large data base, or pool of bibliographic unit-records can be drawn upon to provide multiple bibliographic services of the type required by modern science. Besides, because information of consequence to mission-oriented interdisciplinary science is included within the scientific disciplines, and because of new system capabilities, information flow from the disciplines to missions is enhanced.

At the time of the study the reaction to the Heller Report was not encouraging because there was no effective way to re-package the wide diversity of products being produced by the services (5). Since then, there have been two major developments. First, many of the services have applied the computer technology to their operations, and have produced machine processable copies of their bibliographic data bases. Second, there have been major efforts toward the development of standard data elements and formats to facilitate the management of the

data bases. Such change in the information environment induces the application of machine methods for the implementation of the Heller conclusion and the coordination of efforts among the secondary services.

However, there are several actions required for the development of such a program of coordination and upgrading of the secondary services. First, there is a need for more studies on the coverage of different subject areas by the secondary services, and the extent of duplication and overlap in such coverage. The report by the Committee on Scientific and Technical Communication indicated that the information on both gaps and coverage is fragmentary, and that more work is needed in this area (1, p.145).

Second, an increased cooperation among primary publishers and secondary services is essential to improve the timeliness of the services, and ensure better access to documents. Such interlinkage has been developed between Chemical Abstracts Service and some publishers, where the publishers have been sending the corrected page proofs of the first issues of their publications to CAS by air mail (6). This program should be extended to the other services and should include greater cooperative activities.

Third, a more realistic program of determining topical areas of responsibility should be developed among the secondary services in their coverage of the literature. The available resources will be inadequate to meet the challenges unless the present duplication of efforts is reduced systematically.

Fourth, there is a great need for planning and developing compatible standards of editorial and indexing policies employed by the different services. This is essential for exploring any potential coordination among the secondary services. As has been aptly stated by Burton Adkinson in his address to NFSAIS and ASIDIC (5), "we can no longer afford the luxury of . . . having different technical specifications for identifying a primary source or of having the material organized by numerous technical standards and formats."

The joint study by Chemical Abstracts Service, BIOSIS and Engineering Index (7) to determine the overlap in their coverage and provide information for future cooperative programs is a major and encouraging step. Other similar studies and programs should be developed among other services in all segments of the scientific community. Such coordination of efforts among the discipline-oriented services, coupled with repackaging reference material for interdisciplinary services, could lead to more balanced and effective coverage of the literature, and better bibliographic control among the secondary services.

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Dr. Bahaa El-Hadidy is assistant professor at the Graduate Department of Library Science, The Catholic University of America, Washington, D.C.

Communications of a Bibliographer

Kenneth D. Olson

University of New Mexico Library, Albuquerque, N.Mex.

■ A machine-readable work file becomes a medium for various library functions. Information gathered by way of collection building and appraisal cumulates for use by the bibliographer, reporting on titles in and out of the library, communication with dealers in filling gaps, catalog information for new

titles, supplemental reference information, selective resource guides for library user groups, and for other purposes. As information is gathered, data are handwritten on a computer print file, from which card input is punched without use of forms. The result is a new print file, completing the simple cycle.

IN 1970 the University of New Mexico Library titled a few individuals "bibliographers" and set them to work on collection building. To the author were assigned mathematics; physics; astronomy; chemistry; geology; all the biological sciences with incursions into medicine, pharmacy and health; chemical, civil, electrical, mechanical and nuclear engineering; plus psychology and home economics education. In these subjects the library contains perhaps 150,000 volumes if the report literatures of deposit by federal agencies in support of science are included. In the fields represented there were fourteen academic departments, and twelve doctoral programs.

The tasks of the bibliographer were collection building and appraisal, faculty liaison for library resources, bibliographic support of the reference function, and instruction in bibliography.

The system here described was devised as both aid and vehicle.

For collection building there must be a handy record of what the library has and is receiving. New materials are always in view. The deluge of publishers' notices and announcement media is unceasing. Note must be taken of some, some acted upon immediately, some filed, some referred elsewhere. Inventories are made, gaps are noted, desiderata orders are prepared, submitted, or filed. Requests for items are received, ordered, reported upon. Watch is kept for the appearance of many titles requested before publication. Replacements and new editions are sought. Catalog entries must be established, including precedent relationships.

In this institution a tradition of faculty dominance of the library acquisition process was strong. There was a

rule that subscriptions and standing orders must be initiated in an academic department, and that the first year's cost was borne by the initiating department. Although perhaps restrictive, the rule also enlisted active participation in the collection building process, and provided occasion for good working relationships with the teaching faculty. Thus it was appropriate that record of the library's acquisition progress be made available to its most interested patrons.

Primacy of Serials

The literature of science is a labyrinth of serials. Andrew Osborn (1) describes serials according to "the working definitions at the Library of Congress and the Department of Agriculture" "on practical grounds" as: "Any item which lends itself to serial treatment in a library; that is, to listing in visible indexes and other specialized serial records."

Special Circumstances

Thus a bibliographer's everyday work file came to be conceived as a serial record. In addition, some special circumstances shaped the result. Most significant, some instruction and practice in programming enabled the author to take advantage of the offer to the university faculty of free use of the computer. Expert and sympathetic help was available from the Applications Group of the staff of the university's computing center.

Another circumstance was having worked in relative isolation for enough years to conclude this is the bibliographer's normal situation, and hence the system should be easily operable without supporting staff. The university library's serial records were both unobtainable and unusable. An available alternative was "Southwestern Union List of Serials," a broadly inclusive list of the complete reported serial holdings of thirty libraries, including two medical libraries. It was dated 1968, but it contained something more than twenty thousand titles and could be borrowed

on tape from the Biomathematics Department of the Lovelace Foundation for Medical Education and Research.

Modification of Existing Records

The received record first had to be transcoded from a Burroughs to an IBM EBCDIC code, and then records were reformatted for more detailed use. An eight digit sort number ordering the entries was expanded to thirteen digits; this yielded great expandability within any title record, any line of which could be addressed individually in a single sequence of the entire file. One field added was for date, in such a manner that the date of input became automatically recorded with every line of new input, indicating currency of the information. All original records were initialized with "0/0/00".

"Southwestern Union List of Serials" contained an estimated eighty thousand lines of information, which as a print file would be very bulky. The size was reduced by reading out of the working master tape about half the contents not of prime interest in the sciences, and by suppressing the printing of all but first lines of original records. Suppressed lines reappeared whenever one of these entries was brought into use.

Information Included

Of the five digits added to the sequential sort number, two were used to classify information into ten groups of ten items each; within any of these items the remaining three digits allowed up to a thousand lines of information! Of a possible one hundred information items provided for in the sort number, only eleven were needed in the work of the bibliographer. Distinguished by the two middle digits they were as follows.

Main entry (11). In this the author could indulge in some pet ideas, uniformly applying book cataloging principles to all serial entries (2). Every entry is formally assumed to include author, title, imprint, collation, verification, notes, even if one or more may not ac-

tually occur or, in formal terms, "have null content." Displaying this, the first line of every entry is always reserved for an author element; for all distinctive title main entries it is left blank. The title element always begins on a second or succeeding line, indented as in traditional catalog card style. Imprint is included, and the attempt is made to make it reflect the history of the publication; for this reason place, publisher, and date are included together and sometimes combine information that appeared in notes in *New Serial Titles* or in Library of Congress catalog entries. Collation is made to conform in principle with the collation of monographic titles, but also includes cross references for title changes. In keeping with the now established principle of new entries for changes of filing title, collations normally include only volumes published with the immediately associated title. Exceptions are allowed for insignificant filing order changes or for insignificant periods of publication.

For exchange of information an otherwise extraneous "verification" element was added, which could also be called "cataloging sources." It indicates the information is essentially as found in *New Serial Titles*, a Library of Congress printed card, *Union List of Serials in Libraries of the U.S. and Canada*, 3d ed., sometimes *British Union Catalog of Periodicals*, and, frequently, significantly modified by this bibliographer with more current information.

Notes (12). The remaining, optional element was made a separate item in view of the length of the record sometimes involved. References to antecedent and succeeding titles might be included if they did not number with the series. In the past, *New Serial Titles* sometimes recognized distinctive serial titles that were later entered under a name. *NST* entries were then preferred but the *LC* variant, if known, was indicated in a note.

Selection list codes (13). Any number of two or three character codes could be input to this item, by which programming provided for selection of sublists

for various purposes, mostly for the benefit of user interest groups.

Location in the immediate University of New Mexico Library system (21). Since all these item fields were any number of multiples of line length, call numbers could be augmented by any desired notes that a library user might find helpful. In fact, this item was used to record all the separate locations of the volumes of a series the catalogers might classify separately.

Location in accessible libraries and places other than the university library (22). This was helpful for such purposes as pointing up duplication with the nearby Library of the Medical Sciences; or, for referring requestors to it.

Holdings information (31). A uniform style of noting holdings was employed for clarity, but in prose, in terms of what we either "have" or "lack." As indexable words, lists could be selected and printed according to them, but they were also helpful visual symbols. "Lack" was preferred, as it called attention to titles with gaps to be filled.

Current status of acquisition (41). The record distinguished subscriptions, standing orders, acquired by individual purchase, not currently received, wanted or under consideration and by whom, received by exchange or by deposit. For regularly received titles sources were also shown, and any special arrangements or conditions such as combination subscriptions, memberships, etc. Special obligations or wants could be noted, such as the announcements of extra volumes or large indexes not forthcoming with the subscription.

Policy notes (42). Decisions could be recorded to guide purchases, dispositions, commitment to acquire or to avoid microtext, or instructions for tasks to be performed when time and staff permitted, such as extensive inventories and searches.

Retrospective acquisition activity (43). Here could be recorded quotes from dealers for prospective large purchases, and a log, with dates and other data and references if wanted, of acquisition activity.

Bibliographic control (51). This item collected any type and amount of data desired concerning the existence and location of indexes, or coverage by index-abstract services, or listings of part volumes or analyses of contents.

Batch Mode Processing

In the course of the day's work, notes and data were handwritten on the master print file, which was at the same time the bibliographer's desk work pad and the source data for the next update. At intervals the bibliographer would detach a portion of the file, find a key-punch machine, and punch the handwritten data and indicated changes in the record. In this "homemade" system it is necessary to proofread the cards and to be familiar with the bibliographic style and its purposes, but the programmed "editing package" with its free field input and its single character control is easy to use and to remember. No input forms are used. Lines are composed and numbered in the computer. Only instructions have fixed relationships, but they can begin in any card column; they tell the computer to add or substitute, insert, delete, suppress print, print only, place a code, place data in so many columns, etc. An "instruction" is a flag character followed by a line number followed by a control character. Successive instructions addressed to the same title are abbreviated.

A header card includes the date of input which gets read into each new line record, and a run generating a new master tape may take as much as one minute of CPU time. Only the portion that was updated is printed, and this replaces the portion that was detached from the work pad on the bibliographer's desk, ready for the collection of more handwritten data. And that is the complete cycle.

Applications

The main function of this working bibliography was logging everyday actions and decisions touching resources in such a vast array in so many disci-

plines as to preclude sustained effort for any one. A perfect operation would call for fulfillment of the condition that, for any serial title occasioning the time of the bibliographer, record would be left of the latest and best feasible status of these concerns: 1) correct bibliographic identification, 2) the library's present obligation, by which is meant whether currently received and how, plus current inventory, and 3) the library's intention toward this particular title in view of current acquisition policy, with latest actions taken.

This first concern would be shown in information items 11 and 12, title information, and also on occasion in 51, bibliographic control. The second would be indicated by the library's holdings, item 31, and by 41, current status of acquisition. The last concern might be indicated by decisions and notes recorded in the 42 item and also by symbols and notes in 41 implying interest or lack of it.

Without help, of course, it wasn't possible to cover the field. One hope never realized was the merging of basic title information from the official serial records of the library. Much of the other information remained unduplicated.

In addition to the program for updating the master file, a second program called ACCESS was written to read the master tape for a number of outputs.

Listings of selected titles could be easily printed. By file number, any group of titles could be combined and annotated, if desired, with notes input for the occasion. One use that was contemplated but never realized was the listing of selected resources in multiple copies for use with lectures to students.

The facility was used for canvassing dealers for the latest quotations on specially wanted items or annoying small gaps. The nice thing about it was being able to specify few or many titles for the occasion, duplicating data painstakingly gathered without a further painstaking typing job. On their part, the dealers appeared to appreciate working with such customer input because of the full bibliographic information and because the

gaps were exactly identified, minimizing the need for correspondence.

Librarians tend to discount the efforts of publishers in relating titles of similar appeal in series; but faculty members see the brochures and are frequently interested. In associating items of related interest, by no means limited to publisher selections, serial titles were frequently recorded that the library's official records did not recognize. Parts of the series found by unrelated entries in the card catalog could be located and shown under the series titles as answer to someone's known interest, perhaps obviating the desirability or non-desirability of a standing order. At an appropriate time—budget-wise—a list could be run, contributing to the order department series catalog information plus the status of holdings. It might be selective by title, or it might be by means of a header card that told the computer to include “all titles for which there are no standing orders.”

One well-known series has more than five hundred part volumes, which bibliographically are very messy. At the reference desk, it was sometimes quite difficult to find a volume for which the requester brought only a number reference from some engineer's cryptic reference list, because all of the parts were classified separately, without more than a fragmentary identification of the series as such. It took more than a week of hard work to identify and find all those parts in the library; their locations were brought together in one place under the series title.

Following a cycle of updates from A to Z of the alphabet, or at other appropriate times, the ACCESS program might be run successively with header cards specifying selection by two letter codes in the 13 item; the resulting selection lists were sent to the library user groups for whose interest the titles had been noted in some previous input, replacing older lists from the previous cycle. To the library representatives from the various disciplines, these served as a means of communicating the present status of library acquisition of interest, inasmuch

Figure 1. Sample Page

Sample printout page showing kinds of information gathered, and uninhibited manner of gathering. All pertinent information collects in a single, easily revised file

| LECTURES IN ADVANCED MATHEMATICS. CHICAGO, MARKHAM, 1967- | | | | | | | | | | | | |
|---|-----------|---|---|-----|--|--|--|--|--|--|--|--|
| . V.1- . NST. | | | | | | | | | | | | |
| MA. | | | | | | | | | | | | |
| NMU CLASSED SEPARATELY. | | | | | | | | | | | | |
| LACK V.2. | | | | | | | | | | | | |
| A STANDING ORDER. ABEL. | | | | | | | | | | | | |
| N39924150 | | | | | | | | | | | | |
| AA | N39524100 | 1 | 1 | 002 | | | | | | | | |
| AA | N39524100 | 1 | 1 | 003 | | | | | | | | |
| AA | N39524100 | 1 | 3 | 001 | | | | | | | | |
| AA | N39524100 | 2 | 1 | 001 | | | | | | | | |
| AA | N39524100 | 3 | 1 | 001 | | | | | | | | |
| AA | N39524100 | 4 | 1 | 001 | | | | | | | | |
| AA | N39524900 | 1 | 1 | 001 | | | | | | | | |
| AA | N39524900 | 1 | 1 | 002 | | | | | | | | |
| AA | N39524900 | 1 | 1 | 003 | | | | | | | | |
| AA | N39524900 | 1 | 2 | 001 | | | | | | | | |
| AA | N39524900 | 1 | 2 | 002 | | | | | | | | |
| AA | N39524900 | 1 | 2 | 003 | | | | | | | | |
| AA | N39524900 | 2 | 1 | 001 | | | | | | | | |
| AA | N39524900 | 3 | 1 | 001 | | | | | | | | |
| AA | N39524900 | 4 | 1 | 001 | | | | | | | | |
| AA | N39525000 | 1 | 1 | 001 | | | | | | | | |
| AA | N39525000 | 1 | 1 | 002 | | | | | | | | |
| AA | N39525000 | 1 | 1 | 003 | | | | | | | | |
| AA | N39525000 | 1 | 1 | 004 | | | | | | | | |
| AA | N39525000 | 1 | 1 | 005 | | | | | | | | |
| AA | N39525000 | 1 | 1 | 006 | | | | | | | | |

LECTURES IN THEORETICAL PHYSICS. NEW YORK, 1959-63, GORDON-BREACH, 1968-. V.1- . NST.

LECTURES DELIVERED AT THE BOULDER SUMMER IN THEORETICAL PHYSICS. BEGINNING 1964 LECTURES, THAN ONE PART.

NMU OC1/L38

LACK V.4 (PUB. 1963), V.11-D (PUB. 1969).

A STANDING ORDER. FAXON.

LECTURES IN THEORETICAL PHYSICS. WALTHAM, BRANDEIS UNIVERSITY SUMMER INSTITUTE IN THEORETICAL PHYSICS.

SEE

BRANDEIS UNIVERSITY, WALTHAM, MASS. SUMMER INSTITUTE IN THEORETICAL PHYSICS.

LECTURES IN APPLIED MATHEMATICS. PROVIDENCE, RHODE ISLAND AMERICAN MATHEMATICAL SOCIETY, 1963- V.1A-3A, V.1- B.

V.1A-3A, LC60-12712 per order summer, series on Applied Mathematics, University of Colorado, 1957. V.1-4, LC62-21481 under summer, series on Applied Mathematics, University of Colorado, 1960. V.5-7, LC66-39835 under summer, series on Applied Mathematics, Cornell University, 1962. V.8-10, LC68-3335 under summer, series on Applied Mathematics, Cornell University, 1965. V.11-12, LC77-2933 under summer, series on Applied Mathematics, Cornell University, 1967. V.13-14, LC70-31357 under summer, series on Applied Mathematics, Cornell University, 1968.

as new titles and new or changed lines, each with date of input, indicated some of what had been done in the interim. Even apart from the value of the data itself, some of which could be of more interest to the librarian than to the library user, this effort served to cement good working relationships with faculty departments and individuals.

Such a bibliography can be used effectively as a locator and guide to the resources of the library for any desired field. Narrowing the scope to the user's field of vision has good effect. One departmental representative said his list was used to impress prospective new position candidates with library holdings in the field.

Wads of miscellaneous slips and clipped together papers are the customary accrual from comparison checks against lists of significant titles. If it could be assumed those titles are already recorded in machine-readable form, with easy access and input, then printed lists can be selected out in one or more copies for use as worksheets in the collection of data, and may in successive stages display and report the current status of all pertinent data, affected as it is by daily and constant changes. In this manner it effectively "measures" some aspect of strength or weakness of the collection. In this particular system the cards that were punched with title numbers separated by commas were merely kept and rerun from time to time.

Two such lists actually produced and one begun included "List of 1000 Primary Journals Most Frequently Cited in Chemical Abstracts," coverage of *Applied Science and Technology Index*, and the source list from *Mathematical Reviews*. These are not considered highly successful because of the number of titles new to the master file that had first to be entered.

A similar list was produced for the management of a special problem. Medically oriented disciplines were active in the university long before the establishment of a medical school and a library to serve it. Conflicting departmental interests in biomedical library resources cre-

ate the duplication of many journals. A determined effort is being made to end the duplication and to reasonably divide responsibilities of the two libraries. A list of 930 titles was selected from the master tape record, and was used as a medium of communication of dispositions, decisions, concerns, conferral, and referral relative to the location of each title, either in the University of New Mexico General Library or in the Library of the Medical Sciences. When decisions could be made they were recorded, and many transfers were made. Where amenable decisions could not be reached, conflicting valid considerations might in some cases be recorded also. Then, in time, reconsideration may occur. Conflicting concerns were frequently resolved when full details of a listed title were found and added to the meager original listing, or when holdings became known, or that a listed title is no longer published.

Problem Solving

A few summary statements afford the opportunity for expressing author viewpoints. The serial relationship is universally understood as a complicating factor in the management of library materials. In the foregoing presentation the author hopes some points are established for a thesis that the serial relationship at the same time offers an advantageous approach to the management of library materials because it is a self organizing principle; and also, that it is an effective aid in entrepreneurship.

The librarian's counterpart to the scholarship of those he serves is the marshalling and purveying of bibliographic data mostly mundane and insignificant in itself. That is why it is important to communicate it rather than research it again for each use. The work of the cataloger and his data oriented extensions is still the base of library service. The experience of the foregoing experimentation was that earnest labor served to open channels of communication in which the librarian's service was accepted and appreciated on its own terms.

Finally, the computer removes a significant factor of drudgery and places the librarian on the threshold of more worthy problems. That should be the major breakthrough of the current interlinking and accessibility of large data bases we may shortly observe. The foregoing experience argues that there will soon be little reason why the individual librarian may not himself, using simplified access packages, program solutions to many a localized problem of worth, beginning where the common data base and facilities leave off.

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Kenneth D. Olson is temporary serials librarian, University of New Mexico Library, Albuquerque, N.Mex.

Ethiopia's Developing Medical/Health Science Information Services

Theodore P. Peck

Haile Selassie I University Library System, Addis Ababa, Ethiopia

■ A view of the library and information services for the medical/health professions and programs in Ethiopia is presented. These are undergoing rapid change and expansion in order to better meet the health demands of this

emerging African nation. Additionally, it is hoped that interest in and support for other African libraries in a similar period of development will be stimulated.

THE FAMINE caused by severe drought in Ethiopia's provinces has focused world attention on the health problems of this ancient country. Famine and inadequate nutrition are only two of the problems. Disease and proper sanitation have been causes of serious concern for many years as well.

Many countries have been quietly active in their support of medical/health resource programs here in recent years and progress is evident in the malaria eradication programs, in leprosy control, and in the attempts to improve public health. Ethiopia as an emerging African country has an overwhelming task in health care confronting it. It is estimated that the proportion of medical doctors to the population is one in 70,000 (8) and the Public Health College at Gondar had approximately 179 students enrolled in its Bachelor of Public Health and diploma and sanitation programs in 1972-1973 (5). So few trained people to wrestle with the giant health needs of Ethiopia!

The medical and health information services in the country evolved from the establishment of the Public Health College in 1954 and the Faculty of Medicine in 1963 of the Haile Selassie I University. The Public Health College Library at Gondar and the Central Medical Li-

Figure 1. Prince Makonnen Hospital



brary in Addis Ababa comprise the sole medical and health information programs for the whole of Ethiopia.

In each of these libraries the collection development and services are being shaped to fit the particular health problems of the country. It is not possible at present to build comprehensive biomedical library facilities as in the United States and Europe.

With the limited resources available it is a constant problem to maintain adequate development of the collections within the far ranging areas of medical and health sciences. To this is added the increased desire for materials in Amharic, the official language of the country and for details on medicine and health in Ethiopia.

It is difficult to imagine how these information programs could have reached this point of development if it had not been for the generosity of foreign governments, U.S. AID programs, World Health Organization support, gifts from organizations such as the CIBA Foundation and from individuals.

Combined Information Programs of the Two Libraries

The basic similarity between the Public Health College Library and the Central Medical Library is the fact that they serve specific health education requirements as well as the more general health information needs of the country indirectly by provision of library and literature service to physicians, sanitarians, and public health workers in the field. In addition, the recent trend of attempting to educate residents of rural areas with little or no basic schooling in social problems puts an extra and somewhat unusual demand on the library collections. Field workers in social service also depend on these collections not only for background information on disease or nutrition but also for materials which will help them relate to the concerns of rural people in a developing country.

In effect, these libraries serve two masters, the university to whom they are responsible administratively and the Ministry of Public Health within whose jurisdiction all medical and health services programs are situated. In one respect the libraries are part of the country's main institution of higher learning and have a supporting role in the education and training of future physicians and health workers. On the other hand, there is the understanding that these libraries play an essential part in disseminating knowledge to those in medical and health practice and to others.

In reviewing the holdings of these agencies it is easy to see that they are below standard. The essential question is, however, what is "standard" for a developing country? The collections are thus being measured against lists prepared for smaller medical libraries by organiza-

tions in the United States but with an attempt to adapt and make special considerations in keeping with the situation as it appears in Ethiopia.

From the list *500 Selected Periodicals for the Medical Library* by Jacqueline W. Felter, an additional eighty titles have been selected to round out the Central Medical Library's holdings. Already WHO has underwritten the major portion of our periodical budget. The Public Health College Library holdings should also be fleshed out to keep practitioners informed of advances in this field.

Monographs can be requested individually and many gifts are received from foreign governments through diplomatic representatives in Ethiopia.

More and more one finds oneself in the position of begging for favors, gifts, grants, and understanding of the enormous needs of this country particularly in the medical/health information services. There is the potential in Ethiopia for increased education and library services but it will be a long time in developing and will also depend upon the rate of technological change and industrial output in the country.

Reference and information service usually revolves around the librarian; however, in these smaller branch libraries, it is frequently the trainee or other paraprofessional who gets the questions. Sometimes it is because of the language barrier—especially in Ethiopia where Amharic, a difficult language, is spoken.

The information service appears to be ordinarily adequate for the situation. It is not ideal and does not come up to western standards but it must be viewed in light of the many problems facing the library service. The patron and the library worker usually manage to find the item or information desired through a joint effort.

Training

A series of workshops on reference techniques is planned in cooperation with the head of the reference department of the university's main library.

These training sessions would be for all branch paraprofessionals and not only the medical and health library staff. It is a stopgap measure but it will upgrade present services until more Ethiopians can receive education in librarianship equivalent to the master's program.

One significant aspect of reference work in these libraries is the helpful attitude of the library staff. Whether it stems from a national pride in education and learning or in wanting to help their fellow Ethiopians, the desire to be of service is evident.

Inadequate space also is a fact of life. Most libraries sooner or later find that their collections and service areas have outgrown their space. The Public Health College plans to add graduate programs in public health and to become a regional institution. New undergraduate curricula would be added such as teacher training. This will have a dual effect on the library there. The collections must be broadened and more reader seating space and work area must be found.

Plans of the faculty of medicine call for centralization of pre-clinical, clinical, pharmacy and nursing programs at the Prince Makonnen Hospital in which the Central Medical Library is located. At present certain of these educational programs are situated at other locations and campuses of the university in Addis Ababa. Again, the consequence of this for the individual library will be a further exacerbation of the space situation.

Dependence on assistance from outside Ethiopia is common. We must look to external benefactors for scholarships and grants for specialized training in medical librarianship if these libraries are to continue to expand and develop information services in the future. Also for at least a decade professional librarians from America and Europe have been involved in the coordination of the functions of the public health and the medical libraries. The plan, as a whole beneficial, has been to bring foreign librarians in for a period of two years to help upgrade collections and services.

However, two years is too short a time for an outsider to accomplish much in a

developing country. At least the first year or longer is consumed with learning the customs and prevailing conditions. Four years would be more advantageous for it would allow two of these years for implementing and following through on projects.

Instead, when the foreign librarian has completed his tour of duty, responsibility for the library's operations has returned to inadequately trained staff. This does not discredit the paraprofessionals who have had to assume these posts. It is simply a fact of life in countries such as Ethiopia that very few local professionals are available and that even these are lured away to better paying positions in industry and the private sector leaving the paraprofessional to be the backbone of the education library system.

Public Health College Library, Gondar

This institution was founded in 1954 as part of the Public Health College and Training Centre and became associated with the university system in 1961 when the college affiliated with the Haile Selassie I University. Its ties with the university library were tenuous until 1974 when it was agreed that the Public Health College Library budget should come under the control of the university librarian. Previously the university library merely performed an advisory function while the library reported directly to the Dean of the Public Health College.

The library occupies buildings left from the Italian occupation which are part of a public health hospital complex. Unfortunately, no renovations are expected since the five year plan of the university calls for an expansion of the college into a large regional educational centre which will include a new library building.

The budget for 1972-1973 was E\$30,-226.80,* a paltry sum for such an essential function of the college. The prob-

* 1US\$ = 2.07E\$.

lem lies in that about E\$900,000 of the college's E\$1,600,000 total budget had to be used for a 200 bed hospital which is a function of the Public Health College and is the only hospital for miles (5). Therefore the library was able to afford only 191 books in the 1972-1973 budget year to supply the needs of approximately 200 full-time students. A USAID grant in 1961 of U.S.\$50,000 did help to establish the beginnings of a core public health science collection. A problem has been in building upon this base and keeping up with new information resource materials.

A series of surveys and assessments by professional librarians in the last five years has shown only too clearly the strengths and weaknesses and the dimensions of the job to be done. Though it has not been possible to make many of the changes proposed in these surveys, they have been advantageous as input for an overall five year development plan for the entire university library system.

An interesting defect is the lack of material relating to Africa and especially Ethiopia. One reason is the lack of a depository program for official documentation in Ethiopia. Librarians must continually search out and beg copies of reports, documents, papers and other publications on medicine and health in Ethiopia as well as on other topics. Another reason is that the output of publications in Africa and the Eastern countries is not large enough to fill the demand so textual materials must be imported from the U.S. and Great Britain at high cost.

Cataloging is done on site at the library in Gondar. LC cards are ordered for books received. Original cataloging and the addition of subject headings over a period of time by paraprofessionals has developed a card catalog which should be reviewed by an experienced professional cataloger. Due to the distance from the main library in Addis Ababa and shortages of staff in the central catalog department, this special assistance cannot be provided. Contact is made with the central catalog depart-

ment by mail concerning inquiries about catalog entries. The lack of sufficient cataloging tools in the branch libraries makes this a necessity.

The collection is small at present and as the college expands many new monograph and periodical titles will have to be added. There are approximately 10,000 monographs and 261 journal titles; but a large percentage of these have not been kept current because of difficulties in claiming missing issues and budgeting problems.

The Public Health College Library will be checking its collections against basic bibliographies prepared by major health organizations in different parts of the world. This will help find the gaps in its holdings and will be used as part of proposals for further grants to strengthen the holdings.

We expect to establish better communications between this library, the central library in Addis Ababa and the Central Medical Library. Distance between the various locations, a major problem in Ethiopia because of the geography of the country, and the former separation of the Public Health College Library from the university system has meant that the library at Gondar has operated in a kind of vacuum. Now it is clear that the two health information related libraries have much in common and should have close and frequent liaison. The Central Medical Library should keep the library at Gondar informed of important acquisitions of interest to clientele of both libraries and make certain that journal articles on medicine in Ethiopia are also duplicated in the Public Health College Library (5).

Central Medical Library, Addis Ababa

The library has been allocated space in the new Prince Makonnen Hospital in the heart of Addis' business district. The 400 bed teaching hospital was named as a memorial to a son of the former emperor. The hospital is referred to both as the Duke of Harrar and Prince Makonnen Hospital as these were the titles of Haile Selassie's son.

**Figure 2. Central Medical Library,
Originally Designed as a Ward**



The jurisdiction of the hospital belongs to the Faculty of Medicine of the university and the Ministry of Public Health. Certain areas of the hospital have been allocated to each institution. The hospital is under the sponsorship of the Swiss government; physicians, technicians and nurses from Switzerland compose part of the hospital staff. The Swiss representatives have a training and educational mission but at the same time are learning firsthand about tropical diseases and those endemic to Ethiopia.

The emphasis in the clinical program at this hospital is preventative medicine and public health (5). Pre-clinical students receive their training with the Faculty of Science at another campus location. Pharmacy is also taught in the Faculty of Science but plans for the immediate future call for a combining of all medical, pharmacy and nursing programs at this location. At the time of this writing it is uncertain whether the university will be closed for a year or more and whether the medical education programs will be temporarily interrupted by the political events in the country.

The Central Medical Library was housed on the science campus until 1972 when it was removed to its present quarters. Evidently, when the hospital was designed there was no plan for a library and the space the library occupies was intended for a ward. Sinks and wash areas in alcoves along the library walls prevent full utilization of our inadequate floor space. The library also has two rooms in the basement where overflow of periodical runs are stored.

Collections

By western standards the collection of information materials is quite small—10,000 monographs, approximately 10,000 bound journals, 250 reports and 1,400 or so photocopies and reprints of journal articles on medicine in Ethiopia.

The monographs cover a spread of interests found among the teaching faculty and research staff. These represent botany (medical), zoology, mathematics, physics, chemistry, natural history (plant and animal life forms), education (curricula preparation and management as well as educational psychology), sociology and social work as well as the major core collection in the health science area. In this latter category, public health, pathology, anatomy, physiology, and surgery are numerically strong.

The library currently receives 380 journal titles which include some of the basic publications essential to any medical library. Information from the primary fields of medical science is presented in these holdings; however, added strength is needed.

In both the monograph and journal situation, a closer communication with faculty is essential. Contact with teaching faculty especially has been allowed to falter because no professional librarian was present to guide the library's progress over the past several years. A library committee formerly active ceased to hold meetings and too many teaching faculty have begun to build office collections and are associating less frequently with the medical library.

Cataloging and Processing

Orders for new materials are processed through the acquisitions department of the main university library. However, cataloging of medical materials is done at the Central Medical Library. This practice is probably a holdover from a time when the medical library was not considered a part of the university library system. A hybrid cataloging system has resulted with modified LC classification scheme and MESH subject headings from the U.S. National Library of

Medicine. The questions raised earlier in this paper about the Public Health College Library are similar here. Can a non-professional whose command of English varies make consistent decisions as to proper subject headings to be used in the card catalog? Also of importance is the interpretation of the LC classification schedules.

The Central Medical Library catalog does seem to provide an accurate record by author and title of library holdings. There is no subject catalog as such but instead a reader must approach a subject by looking in a subject drawer to find several call numbers listed on a catalog card. One could either go directly to the shelves and search under this number or look in the shelf list to find more complete information about the individual titles.

For economy of effort descriptive cataloging practices have been overlooked and some of the detailed information found on standard LC cards omitted. I have wondered too how many readers are patient or sophisticated enough to find books by this kind of subject system. Since the staff here will most likely be limited to one professional for some time in the future, centralized cataloging seems to be a necessary next step in the library's programs and discussions for this are underway.

Services

The clientele is made up of students, faculty, research personnel, nurses, and physicians in private practice. All members of the Ethiopian Medical Association may borrow materials and use the services of the library.

Reference work has been limited to verifying citations for patrons, tracking down bibliographies and searching for special information sources in other locations of the world. The absence of a well-organized reference service in the past is probably the primary reason why there are not more reference inquiries. The resident faculty and staff especially should be given orientation on the information capabilities of the library.

This kind of public relations project combined with more library staff training should enable the library to more fully serve client needs. It will be a matter of building up confidence among the patrons in the services.

A popular request is for photocopies of articles from medical journals. For those journals the library does not own, requests are sent to the National Library of Medicine. NLM has been particularly helpful and this type of assistance is invaluable to libraries in developing countries.

The library may also request Medlars searches from the WHO Medline Centre in Geneva. Notices of this unusual opportunity have been sent to all faculty and research personnel and members of the Ethiopian Medical Association. Interlibrary loans are made in cooperation with local libraries and others in East Africa.

Index Medicus is used frequently to provide brief bibliographies for patrons. The reference collection like the rest of the collection needs more depth. It is hoped to include reference tools from fields related to medical and health science such as the *International Encyclopedia of Social Science* since many patrons are involved in medical-social work training.

The Central Medical Library performs two unique services: 1) indexing of the *Ethiopian Medical Association Journal* and 2) forming a unique collection of materials on medicine in Ethiopia.

The acquisition and cataloging of materials and articles on medical practice in Ethiopia has a number of implications. First, the university library system has a policy of collecting all materials available on Ethiopia as part of the national heritage of the country made difficult because of the lack of a depository policy. Items in the area of medicine and public health are collected and processed by the Central Medical Library while the remaining fields of knowledge are housed in the Institute of Ethiopian Studies Library and in the Ethiopian Collection of the main library.

In addition, it is difficult to learn of articles written in journals abroad which may not be received in this country. A valiant effort to find references to such items was made in the late 1960s by two professional librarians on the Central Medical Library staff. They compiled an extensive collection of citations (7). The bibliography covers the years 1942 to 1969 and contains 1,132 entries.

A proposal is being considered now by the research committee of the university library to update this bibliography, prepare punched cards for each entry and to print it out in a revised format. It may be possible to reduce the type size in order to allow for space for advertising of local firms in order to assist with the expenses. In addition, with the increasing interest in Africana in institutions of higher learning in the U.S. and Europe this revised publication could be used as an exchange item.

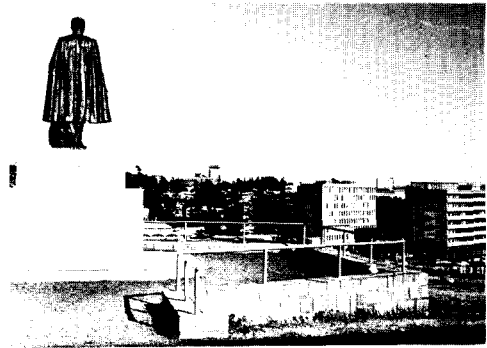
Author and subject entries are available for each article of the collection of materials on medicine and health in Ethiopia in the Central Medical Library's catalog. This provides access to this invaluable research material and is used not only by visiting scholars but also by local physicians and students. It is one of the most important services of this library.

Future of the Medical/Health Information Services

One needs to be a prophet or visionary to look ahead to the future of the information requirements and services of this changing country. How can priorities in library programs be set when all seem of equal importance? For example, should training in health science documentation work be placed before improved budgets and adequate space? The staff of these libraries need continuing education in this area of library and information science. In addition, they also need resource materials. Thus these two areas are uppermost in any plan for the years ahead.

The fulfillment of these priorities will depend largely on the outcome of trends

Figure 3. View of Addis Ababa. The Statue Is of Prince Makonnen



in Ethiopia's economic and political situation. Continued support from foreign nations for education in Ethiopia will also be needed for years to come. Especially interesting are the plans being discussed by WHO for a worldwide program on health literature services.

Another matter of major importance is to create new relationships and strengthen present ties with health information services in the other African countries. At first this will be limited to East Africa as we explore ways to cooperate with organizations such as the East African Community in Arusha, Tanzania. Another avenue to cooperative systems is the Standing Conference of African University Libraries (SCAUL).

Some particular plans for the future for the Central Medical Library and the Public Health College Library are centralized acquisitions and cataloging; use of computerization for circulation systems, bibliography preparation, and book catalogs; and mini-learning resource centers in both libraries so that medical and public health students may have lectures and other essential resource material in audiovisual format.

Though the medical/health programs in Ethiopia are miniature when compared to those of other nations, they are not static. These services are undergoing a process of growth and are being aligned more closely to the total health science information and documentation requirements of the country. As age-old problems of disease, sanitation and

proper nutrition are being wrestled with in Ethiopia, the library staffs of these libraries will continue to provide their support with documentation, reference service and by connection to major health information operations in all parts of the globe.

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Theodore P. Peck is associate director, Haile Selassie I University Library System, Addis Ababa. He is on leave from the University of Minnesota, Minneapolis, Minn.

SLA HALL OF FAME/1975

President Edythe Moore has announced the election of two members to the SLA Hall of Fame in 1975 who have made outstanding contributions to

the growth and development of the Special Libraries Association at the Association, Chapter and Division levels.

Katharine L. Kinder

As a child, Kay Kinder carefully dusted the shelves and polished the brass in her grandmother's Carnegie library in Rockford, Ohio. Shortly before retirement, she finished establishing a fine, new information center for Johns-Manville Corp. in Denver. In between was a period of professional accomplishment which any SLA member might admire.

Born in Rockford, Ohio. After attending the Rockford public schools, she enrolled in Miami University in Oxford, Ohio. During her college years she worked as an assistant in the circulation department of the university library. She then moved to New York to study at the School of Library Service of Columbia University and in 1936 received both the BA degree (English literature) from Miami University and the BLS from Columbia. She had additional advanced library training at the University of Illinois Library School in 1941/42 on a Katherine L. Sharp Scholarship.

Early positions were at the Columbia University Library and the Mount Holyoke College Library where she remained until 1942. Shortly after the outbreak of World War II, she enlisted in the Navy. She entered as an Ensign, rose to the rank of Lieutenant Commander, and served until 1946.

Following discharge from the service she took her first library job in industry, joining the staff of Johns-Manville. One of her most important duties was the planning and execution of the new library for the Johns-Manville Research and Engineering Center in Manville, New Jersey. Twenty-seven years later, still with Johns-Manville, but in Denver, Colorado, she established an Information Center in the Research and Development Center.

An active member of SLA since 1946, she served the New Jersey Chapter as Secretary, Vice-President, President, Director, and Edi-



KINDER

tor and worked as well as on a variety of committees. For the Association, she has been a chairman or member of the Constitution and Bylaws Committee, the Committee on Committees, the Finance Committee, the Awards Committee, and the Convention Advisory Committee. Interestingly, it was during her chairmanship of the SLA Professional Award and Hall of Fame Committee that the criteria for the Hall of Fame were developed and plans for the initial Hall of Fame completed with the naming of the first twenty recipients of the award.

After holding the office of Secretary and First Vice President of the Association she served most effectively as President of SLA in 1956/57. During her term of office, the Association made important decisions concerning its objectives and policies. To each of her SLA responsibilities Kay Kinder brought an unusual and memorable clarity of thinking and crispness of expression. Her *Special Libraries* article of twenty years ago entitled "What Makes Us Special?" has remained a classic exposition of the special library idea.

For her contributions to the Association and to the profession, it is altogether fitting to present Katharine L. Kinder with the SLA Hall of Fame Award in this year of her retirement.

Safford Harris

When Safford Harris retired in June 1974 from the staff of the Georgia Institute of Technology, Price Gilbert Memorial Library, after 28 years of service, the occasion was marked by the designation of the Safford Harris Area on the fourth floor of the library through the unveiling of a bronze plaque in her honor. At her death on December 19, 1974, the profession lost one of the outstanding map and patent specialists in this country, and SLA lost a distinguished member.

Born in Cumming, Georgia, she worked for a BA in Biology (Wesleyan College) and an MA in Biology (Emory) before undertaking a ten-year career as a teacher and a Case Aide in a number of Georgia counties. After returning to Emory University for her BA in LS in 1942 she became a library assistant at Virginia Polytechnic Institute. In 1946 she went to the Georgia Institute of Technology as documents librarian and served there for a full and active library career, becoming special collections librarian in 1953, and patent librarian in 1971. She retired with the rank of associate professor.

A member of SLA since 1952, she was a charter member of the South Atlantic Chapter (then called the Georgia Chapter), and certainly one of its most productive members. She served the Chapter in almost every possible capacity, including President, 1956/58. She contributed significantly to three Chapter-related publications: *Microfilm Abstracts Author Index* (1956); *Translators and Translations, Services and Sources* (1964); and *Handling Special Materials in Libraries* (1974). She contributed her skill in proofreading, her passion for accuracy and consistency in style, and her complete devotion to the profession of special librarianship in each of these projects.

She was active in the Geography and Map Division in committee assignments and as



HARRIS

vice-chairman in 1959/60. She served on the Translations Activities Committee and the Nominating Committee of the Association. The breadth of her relationships to librarianship were also expressed by her chairmanship of the Special Libraries Section of the Georgia Library Association, 1963/65, and her activities in the Georgia Education Association, the Southeastern Library Association, and the Metro Atlanta Library Association. Other professional interests were the DeKalb Historical Society, AAUW, the National Audubon Society, and the Southern Council for Invention and Innovation.

Those who knew her well honor her by stating that "Safford's desire to be of service to her profession, in her profession, and in her life was most rigorously tested and proven in the manner in which she was able to work with the wary and solitary would-be inventors who came to use the patent collection in hopes of being able to develop their ideas into something useful and profitable. No service task in the information field is likely to be more difficult. A more capable librarian in her field of specialty would be difficult to find."

In recognition of this professional life of rare accomplishment, SLA proudly adds the name of Safford Harris to its Hall of Fame.

National Program for Library and Information Services

SLA/NCLIS Meeting, Jan 14-15, 1975

Twenty representatives of Special Libraries Association* met on Jan 14-15, 1975 with representatives of the National Commission on Libraries and Information Science in St. Petersburg, Florida, before SLA's usual Winter Meeting. The purpose of the meeting was to present SLA's comments and suggestions concerning the Commission's 2nd Draft (Rev) of its "National Program for Library and Information Services." All participants had previously read and examined the Draft Report with great care.

Joseph Becker, a member of the National Commission, gave a slide presentation of the Commission's responsibilities and concerns: establishment of the Commission by Public Law 91-345, responsibilities assigned to the National Commission by law, its concern with problems concerning the national library and information science community, and the variety of opinions obtained from discussions at federal, state and local levels. On the basis of such input, the Commission is developing for submission to Congress a

National Program proposal to strengthen and extend library services to users throughout the nation. The Commission has concluded that a National Program must embrace the public sector at all levels—federal, regional, multi-state, state and municipal governments—and the private sector as well.

As a result of a long question and answer period, it was apparent that there were many areas in the Second Draft Report which were of concern to SLA. Because time did not permit a detailed discussion of all the areas, the members of the SLA Committee divided into four working groups. The items assigned to each group and the personnel were:

Group 1. Objective 6 (p.64).† Make the private sector an active partner in the development of the National Program. (Arterbery, Dillehay, Godfrey and Weise)

Group 2. The term "private sector" as used in the Draft Report appears to have 3 different usages (the information industry, special libraries in business and industry, and both of the above simultaneously). Clarify the term, "private sector," and the position of special libraries and information centers therein. (Beatty, Gonzalez, Johnson, Strable, Tees and Usher)

Group 3. Rework the section, "Special Libraries" (p.25-27) plus amended definitions in Glossary. (Baer, Baily, Carey and Cosgrove)

Group 4. Responsibilities of the private sector (p.94-99). (Bocknek, Frappier, Hewitt, Lane, McKenna and Moore)

These working groups met until late the first night. When the entire group reassembled on the second day, the reports and recommendations from each group were presented. On both days there were full and frank discussions. (On the second day some discussions took place without the presence of the personnel of the National Commission.) These comments and suggestions were aimed primarily at giving more emphasis and clarity in the draft document to the position of special libraries and their collections and services. The numerous comments and suggestions are synthesized into this report document.

* The Commission was represented by two members: Joseph Becker and Bessie Moore, and the Commission's Executive Director Designate, Al Trezza. The travel expenses for 15 members of Special Libraries Association were partially funded by NCLIS. (Special Libraries Association is grateful for the financial support for this meeting from the National Commission.) The 15 members were: Vivian J. Arterbery (Aerospace Corporation, Los Angeles); Francia L. Baily (Coopers & Lybrand, Los Angeles); William K. Beatty (Northwestern University, Chicago); Joyce L. Bocknek (Bell Telephone Company of Canada, Toronto); Diana W. Carey (The Boeing Co., Seattle); Zoe Cosgrove (3M Company, St. Paul); Bette Dillehay (A. H. Robins Co., Richmond); Gilles Frappier (Library of Parliament, Ottawa); Lois E. Godfrey (Los Alamos Scientific Laboratory); Efren W. Gonzalez (Bristol Myers Products, Hillside, N.J.); Marilyn K. Johnson (Shell Oil Co., Houston); Robert B. Lane (Air University Library, Montgomery, Ala.); Edward G. Strable (J. Walter Thompson Co., Chicago); Elizabeth R. Usher (Metropolitan Museum of Art, New York); and Rosemary Weise (ICMA Library, Washington, D.C.).

In addition, 5 other SLA representatives participated in the two-day discussions: President Edythe Moore, President-Elect Miriam Tees, the two nominees for SLA President-Elect, Mark Baer and Vivian Hewitt, and the Executive Director, Frank E. McKenna.

† The page numbers refer to the Second Draft Report Revised.

The Proposed National Program

To summarize the Draft Report very briefly, it is an attempt to state a potential program to be undertaken to make information available to anyone in the United States who needs it. This information will be provided by libraries of all sorts and by information vendors such as the publishing industry, data base producers, indexing and abstracting services, etc. The document studies the user and his needs, the libraries and their problems, and advocates all types of service, with special emphasis on new technology and networks. It is envisioned that the national program will be strongly user-oriented and will encourage local, state, and national information services. Present network activities and barriers to cooperative action are studied.

Eight objectives are identified:

1. Basic minimum library and information service adequate to meet the needs of all local communities.
2. Services to special users including the unserved.
3. Strengthening existing statewide resources and systems.
4. Strengthening the human resources needed to implement the program.
5. Coordination of existing federal programs.
6. Participation of the private sector.
7. Establishment of a locus of federal responsibility.
8. Planning and developing a nationwide network.

To achieve this plan, the National Commission envisages a national network in which the federal government has major responsibilities for establishing standards, making unique national collections available to all, developing centralized services for networking, applying computer use, exploring new forms of telecommunication, supporting research and development and fostering cooperation with similar national and international programs. The state governments, the Library of Congress, and the private sector will have supporting responsibilities.

A few ideas of the National Commission which are of particular interest to SLA are:

1. *Involvement of the private sector.* NCLIS is anxious to involve both business and industrial libraries and information cen-

ters and the information vendors in the national plan, believing this to be a prime social responsibility of private enterprise.

2. *Faster, cheaper communication.* NCLIS believes it is important to speed up and make much less expensive the means of communication between user and information—whether by communication satellite, terminals, Telex or pony express.
3. *Networking.* NCLIS sees networking as the single most important method for implementing their program.

SLA's Positive Reactions

This program was—in the philosophic sense and with some reservations—endorsed by the SLA group. Especially applauded was the bias toward the user and his needs: a concept of major importance to special libraries.

However, there were a number of areas with which we were uncomfortable with the document.

First, in each case the special libraries were lumped into sections called "The Private Sector" and in many of the places where this topic was considered, the entire section seemed to us to deal with information vendors. Apparently, in the National Commission's mind, special libraries were equated to vendors rather than to libraries. We emphasize that this was an erroneous assumption.

To be specific, "Objective 6, Make the Private Sector an Active Partner in the Development of the National Program" and a section under responsibilities of the private sector, while mentioning libraries in the same breath with vendors, seemed to apply only to vendors and to have no relation to special libraries. We were also anxious to point out that very many special libraries are in the public sector in government, universities and public libraries.

Secondly, the section describing special libraries was not acceptable to the SLA members. In part it was inadequate and inaccurate in providing a clear idea of what a special library really is. In part it stressed some problems of special libraries which we believed to be problems applicable to all libraries and to be relatively minor and not worth stressing in a document of this kind.

The third area of concern was that many of the definitions contained in the glossary were inadequate. The NCLIS Executive Director suggested that the National Commission would be grateful for SLA's ideas on any or all of the definitions.

SLA's Negative Reactions

Discussion brought out several concerns, but there was not enough time to explore these in detail. Two notable concerns were:

1. Chapter IV on the information industry had not been written and was not available for our consideration; since the Third Draft Report has been announced to be the last draft, SLA members deplored the complete absence of Chapter IV at this time because its contents can be of vital significance to special libraries and information centers; and
2. The issue of copyright is barely mentioned in the document, and in the view of many participants the resolution of copyright issues is central to the entire concept of a National Program based on networks.

These two crucial questions could have occupied us for the entire two days.

A long discussion on networking and the possible problems for special libraries in joining them brought out a number of fears.

1. The fear that speed of service would be sacrificed because of the need to follow procedures through a maze of possible red tape.

It became clear that this is a real problem which can and must be ironed out by good administrative procedures. In some networks, informal arrangements by special libraries continued side by side with the formal network arrangements.

2. The fear of being inundated with requests from outside users and of being unable to provide good service because of lack of time and space.

Those who have been involved in the networks claimed that their experience showed little increased use in practice. Certain large resource libraries, which were net lenders were designated as such, and received compensation. The smaller libraries who were net borrowers were rarely tapped.

3. The fear of loss of privacy and threat of disclosure of proprietary information.

Obviously confidential material would simply not be included in the data base.

Do We Like the Concept?

A vital issue arose almost at the end of the second day—that of whether as special

librarians we considered that special libraries should be involved *at all* in the national program and whether the federal government should be involved in these issues.

A basic advantage which would always accrue would be better knowledge of the resources and their whereabouts. Another advantage would be that new libraries could join the "club" immediately without going through the long process of getting to know the best sources by trial and error. A member whose library is heavily used believed that the network procedures would give that library protection against abuse.

The SLA group believed, contrary to the apparent ideas in the document, that there was very little difference between special and other libraries in relation to networking. The crucial point may be that, in the broad spectrum of libraries, the special libraries are little known. Their anonymity has prevented a wider use of their resources. They are potentially valuable contributors as well as obvious potential benefitters from networks.

Some members of the SLA group had reservations about these issues, but a consensus was reached that it is too late for us to put forth such reservations. It is now time for us to commit ourselves to the National Program and to become deeply involved in order that, if we do not like it, we are in a position to influence change.

Some questions arising from this meeting which should be the basis of discussion for meetings of SLA Chapters and Divisions are:

1. Should special libraries be involved in networking—especially in nationwide networking?
2. Should special libraries be forming their own networks? Can individual SLA Divisions establish special subject networks as parallel to the MEDLARS program, for example?
3. Would the disadvantages of networking outweigh the advantages?
4. What do you see as the Association's role in: 1) the National Program, 2) networking?
5. Do you think the constraints or barriers are serious? Can they be overcome?

Based on a summary by Miriam Tees to the SLA Board of Directors, Chapter Cabinet and Division Cabinet on Jan 16, 1975.

Manufactured Dialogues:

Winter Meeting 1975

Following is a report on SLA's Winter 1975 Meeting adapted from the report filed by Ron Copen, chairman-elect, Publishing Division.

Attending your first Conference, you are overwhelmed by how many persons you don't know. By always being absorbed with Division activities at Conferences you only occasionally meet others outside your Division. This is logical since the Conferences are planned along Division lines. Conference attendance is usually at least 2,000. Winter meetings are attended by approximately 150 persons and are the times when "housekeeping" decisions and future Conference activities are planned and discussed. Attendees are the Board of Directors, Division Chairmen and Chairmen-Elect, Chapter Presidents and Presidents-Elect, Committee Chairmen presenting reports and any other SLA member who wishes to attend. Since in the Publishing Division, this year's Chairman-Elect is responsible for planning the Conference which will occur when he is Chairman, it was important to go to this Winter Meeting to find out as much as possible about the Denver Conference in June 1976.

Knowing that this was one of the things I wanted to get from this meeting I must report that I wasted my time and money. All we were given from the Colorado Chapter was a list of key personnel for the Conference and a list of several themes which had been suggested. We were told to look over the list and make suggestions. When will the suggestions be discussed? When will it be known what the theme will be? In Chicago? If so, then we will have less than 12 months to plan for Denver. We were also given the names of persons in the Colorado Chapter who would like to be local representatives.

My overall feeling was that the Winter Meeting was a waste of people, time and money. When a governing body gets together, it shouldn't do so because it is traditional but because it has something to govern, discuss or decide. While there were separate meetings of the newly formed Division Cabinet and the Chapter Cabinet, and also a joint meeting of the two Cabinets, there was nothing discussed or decided in my judgment that justifies the expense of over 150 people, traveling from all over the country and Canada for a two-day meeting and spending what must have been a total of

\$150,000 (arrived at from travel, hotel, meal and Association expenses). Perhaps I am alone in these feelings, perhaps not, but I gather that I am not from conversations with other attendees of the meeting.

It seemed to be manufactured dialogues. There has always been a Winter Meeting and you can't have all these people go so far without something to talk about—so you manufacture it. Most of the items discussed at the Division Cabinet meeting had already been discussed by the Board, and since most persons were at the Board meeting, it was repetitive to hear again. The two most lively discussions centered around 1) issues that could, and indeed should, have been decided by the Chapter and Division Cabinet Officers and 2) a problem between a Standing Committee and a Division, regarding the Education Update Sessions at Conference and when does a Division seminar come under the auspices of the Education Committee.

I am trying to be as objective as possible, and while there certainly was a necessity for a dialogue to iron out these problems (which to the individuals were very important and *should* get attention and be resolved), was it necessary for 150 persons to spend almost 2 hours on the first problem and over 50 people to spend almost 2 hours on the second problem? I don't feel it was! It seemed to be manufactured so persons attending the Winter Meeting would have some kind of dialogue and participation. I somehow have the feeling that if the meeting had never occurred, all the things that were discussed would have taken care of themselves.

One of the problems concerned a group of education librarians of the Social Science Division. They had not been allowed to meet as a Group within the Boston Chapter because the Boston Chapter would not recognize groups within their Chapter. This should not have been allowed to take up so much time (2 hours) of all persons in St. Petersburg. If a Chapter will not recognize a group, the group should appeal first to the Chapter Cabinet Officer and if that Officer cannot solve the problem, the Board of Directors should hear the problem and resolve it. So what happened? After two hours of "discussion," a "committee" was formed with three members of the Chapter Cabinet and three members of the Division Cabinet to make recommendations to the Joint meeting of the Cabinets in Chicago. More work is created and now we have something on the agenda for yet another meeting. Does

the end justify the means in this case? Any group of librarians interested enough to want to meet should certainly be permitted. If they want to meet under the banner of SLA, so much the better. Why should one group within the Association tell another group they can't meet? Is this, in fact, a personality conflict? Is it a personal problem and not a philosophical problem at all? Let's get ourselves together and work with each other and not against each other. Let's act like the professionals that we urge others to recognize us as!

The Board of Directors has asked that the dues be raised from \$30 to \$40 beginning in 1976. This was decided at the October 1974 Board meeting. After hearing all the reasons why such a request was necessary, including the fact that even with the increase the Association will still have a small deficit, the Board (the elected officials who represent us all and for whom we all voted) voted this increase. Now surely they must know a great deal of the Association's problems and I assume that they dealt with the details of the increase in depth before just flippantly deciding to raise the dues. The item on the agenda merely said "dues increase for 1976." Again over two hours were spent on "why should this increase occur now," "how can I justify this to my Chapter when I go back?", on and on and on until Gilles Frappier, Past-President, finally said that all present must realize that the Board didn't want to do this unless it was necessary and since the discussion at the Board Meeting went into greater depth than was necessary here, we should learn to trust the judgment of the Board that we had elected to make these decisions. Unfortunately this most obvious and intelligent statement came when there was

no more time to be spent on this agenda item, which should have been discussed only briefly. Again I am certainly not saying that the members should not have any dialogue about the raising of dues, but surely the Board will be aware that they will have to do some selling of this idea to the general membership before the vote at the Annual Business Meeting. If they don't we should all be prepared for an all-day Annual Business Meeting discussing only the dues increase. If 150 people took two hours, think of what over 2,000 persons could do.

Some positive matters were accomplished at the meeting. These were reported in the April 1975 issue of *Special Libraries*.

One of the most important advantages of any SLA meeting, be it on the Group, Chapter, Division or Association level, is the opportunity to meet people. One observation that was made in St. Petersburg during a discussion about networking seems to cover this idea. Shirley Echelman said that in reality networking was what SLA was all about. When you need something you can almost always get it through SLA contacts. People make up SLA, people are the backbone of this volunteer organization, and therefore meeting people is what Conferences and Winter Meetings are all about. The people who were in charge of the Division and Cabinet meetings were organized and knowledgeable and efficient. I'm just sorry I feel that so much of the time and dialogues were manufactured.

In these times of increased economic stress and belt-tightening, perhaps the tradition of Winter Meetings should be reconsidered. While it is nice to see old friends and make new ones, perhaps we should re-evaluate the necessity of having this get-together.

British Learned Societies Exhibit at SLA Conference

Fifteen learned societies and institutions in Britain, which include some of the most distinguished and certainly the oldest in the world, will be represented at the SLA Conference in Chicago in June.

To cater to the interests of these specialized institutions, the Association of Learned and Professional Society Publishers was set up in 1972, and there are now thirty-seven members. The Association is organizing the British participation.

The activities of the members cover some 150 journals, and a large number of books and non-periodic publications. A wide selection of these from each of the societies represented will be on stands at the exhibition connected with the conference. The journals and services provided by the ALPS members include scientific and technical information, learned data and scholarly publications of all kinds, as well as research reports and reviews not normally issued by commercial publishers.

SLA South Atlantic Chapter Participates in ASIS Convention

The efforts of members of the SLA South Atlantic Chapter contributed much to the success of the ASIS convention which met in Atlanta on October 13-17. Members who belong to both organizations acted as planners, hosts, and often, tour guides. Others in the Chapter operated the SLA booth in the exhibit area.

A social hour and dinner arranged by the Chapter at the Midnight Sun Restaurant brought together local members and visitors from many SLA Chapters throughout the country.

The South Atlantic group also represented SLA with a program on the conference agenda. A distinguished panel discussed minicomputers and their applications for libraries.

The panel moderator was Bob Kyle, an information consultant from Decatur, Georgia. The other members of the panel were Millard F. Johnson, Jr., research associate in

machine methods, School of Medicine Library, Washington University; Glen L. Brudvig, professor and head of the Biomedical Libraries of the University of Minnesota; David T. Waite, president, Information Dynamics Corporation; Andrew Stin Miyakawa, advance system specialist, Technical Analysis Corporation; and Audrey N. Grosch, special projects officer, University of Minnesota Libraries.

Andy Miyakawa first gave a brief history of the computer as it led up to the development of the minicomputer. A minicomputer was described as one being small enough to be portable and costing \$100,000 or less.

Mr. Brudvig then spoke on the development of a minicomputer system to be used by the University of Minnesota Biomedical Libraries. He was followed by Mr. Johnson who spoke about minicomputers and their use in library networks.

Mr. Waite discussed the bibliographic services that his company offers through BIBNET, an on-line system of dispersed computing. The panel discussion was summarized by Ms. Grosch.

SCHOLARSHIP FUND Contributions Received Jan-Dec 1974

| <i>Name</i> | <i>Amount</i> | <i>Name</i> | <i>Amount</i> |
|---|---------------|---|--------------------|
| H. W. Wilson Foundation | \$ 4,000.00 | In Memory of Carl H. Kretschmar, Helen V. Hall & Helen Wiederrecht (Food Librarians Division) | \$ 75.00 |
| Anonymous Trust Income | 3,057.90 | Heart of America Chapter | 55.00 |
| In Memory of Josephine I. Greenwood (Mrs. Marion Disbrow & Public Utilities Division) | 1,145.00 | Mrs. Carolyn S. Kirby | 30.00 |
| Science-Technology Division | 1,000.00 | In Memory of Florence Armstrong (Michigan Chapter) | 25.00 |
| San Francisco Bay Region Chapter | 500.00 | In Memory of Kenneth Fagerhaugh (Pittsburgh Chapter) | 25.00 |
| Southern California Chapter | 322.00 | In Appreciation for the Work of Frank J. Schilagi (North Carolina Chapter) | 25.00 |
| ICI United States | 250.00 | Joseph M. Dagnese | 25.00 |
| In Memory of Janet Fogarty & Jewell Maurice (Pharmaceutical Division) | 200.00 | J. Eloise Givens | 25.00 |
| E. I. DuPont de Nemours & Company | 100.00 | Mrs. Ruth Hertz | 25.00 |
| Standard Oil Company of California | 100.00 | Helen E. Iseminger | 25.00 |
| In Memory of Bill Woods (New York Chapter) | 100.00 | Hester C. Meigs | 25.00 |
| In Memory of Logan Cowgill (Washington, D.C. Chapter) | 75.00 | Frances J. Rugen | 25.00 |
| | | Total Other Contributions Under \$25.00 | 973.50 |
| | | Total Contributions Jan-Dec 1974 | \$12,208.40 |

Washington Letter
March 14, 1975

Williams & Wilkins Case

The Williams & Wilkins case was concluded Feb 25, 1975, with the Supreme Court announcement that "The judgement is affirmed by an equally divided court." The effect of the 4 to 4 vote, with Justice Harry A. Blackmun abstaining, is to uphold the 1973 decision of the U.S. Court of Claims against Williams & Wilkins. The Supreme Court took no official position and wrote no opinion that might serve to clarify the broader aspects of the copyright controversy. The decision was limited to the specifics of the Williams & Wilkins case. Prospects for further court challenges appear inevitable unless Congress legislates a solution or the contending forces find some formula satisfactory to both sides.

National Commission on Technological Uses of Copyrighted Works

The Register of Copyrights Barbara Ringer has requested \$337,000 to provide for expenses of the Commission on Technological Uses of Copyrighted Works. Authorized by P.L.93-573, the Commission is charged with responsibility for studying the impact of technological developments on the protection accorded copyright owners and making recommendations on changes in the law to assure access to copyrighted works and, at the same time, give appropriate protection to copyright owners. The funds requested would provide 16 staff positions, including a \$36,000 information transfer specialist, to support the work of the 13-member presidentially appointed panel.

Freedom of Information Act Amendments—Implementation Regulations

In compliance with requirements of the Freedom of Information Act Amendments of 1974, P.L.93-502, federal departments and agencies are revising their regulations and procedures governing public access to their records and information. A compilation of the revised regulations of 35 departments and agencies appears in Part II of the *Federal Register*, Feb 19, 1975, v.40, p.7233-7348. Subsequent issues contain additional revisions as they become available. A Justice Department memorandum to heads of federal departments and agencies giving guid-

ance on the application of the Freedom of Information Act Amendments of 1974 has been published in the *Federal Register*, Dec 18, 1974, v.39, p.43735-43739. It provides valuable insights into the problems involved in implementing the revised law.

GPO Document Distribution

"Pricing of Publications Sold to the Public: Government Printing Office" (No. B-114829) is the title of a U.S. General Accounting Office report prepared for the Joint Committee on Printing released for distribution on Feb 6, 1975. Matters dealt with in the report include the financial philosophy underlying the GPO sales program, the relationship of the pricing structure to appropriations, legislative history and practices in determining selling prices, and GPO's pricing formula and its application. GAO finds that although the law governing the pricing of government publications has remained essentially unchanged since 1932, definitions of the items of cost which enter into the formula for price determination have changed resulting in drastic price increases. The review concludes that there is need for a better system of cost allocation, more detailed analysis in determining price increases, and a more consistent application of the pricing formula. The GAO indicates that further changes in the pricing formula will be evaluated during future reviews at GPO. Librarians will find a careful study of this report rewarding. Copies may be purchased for \$1.00 from the U.S. General Accounting Office, Washington, D.C. 20548.

Federal Budget Reductions, FY 1975

On Mar 10, 1975, by a vote of 371 to 17, the House passed H.R.4075 approving 5 and rejecting 31 of the budget rescissions recommended in the President's message of Jan 30, 1975 (H.Doc.94-39). All proposed cuts in library programs were rejected and funds appropriated for these purposes were authorized to be released. The bill is now in the Senate where favorable action is expected. Under the provisions of the Congressional Budget and Impoundment Control Act of 1974, funds should be made available for obligation by Mar 14 or shortly thereafter.

Ruth Fine
Washington, D.C.

COMING EVENTS

May 5-7. Slide Librarianship: A Contemporary Survey, institute . . . New York City. Topic: Art History. For information: John C. Larsen, Department of Library Service, Columbia University, 516 Butler Library, New York, N.Y. 10027.

May 15-17. Library Orientation for Academic Libraries, 5th Annual Conference . . . Eastern Michigan University. Write: Hannelore Rader, Orientation Librarian, Eastern Michigan University, Ypsilanti, Mich. 48197.

May 18-20. American Records Management Association, seminar . . . Sheraton Tara Hotel, Framingham, Mass. Sponsor: N.Y., N.J., and New England Chapters, ARMA. Contact: Louise Sullivan, The Mitre Corp., Bedford, Mass. 01730.

Jun 2-13. National Information Systems Planning in a Global Context, seminar . . . Syracuse University. For information write: School of Information Studies, Syracuse University, 113 Euclid Ave., Syracuse, N.Y. 13210.

Jun 8-12. Special Libraries Association, 66th Annual Conference . . . Palmer House, Chicago, Ill. Theme—Systems and Networks: A Syner-

gistic Imperative. Advance Registration for members closes May 7.

Jun 18-20. Drug Information Association, 11th Annual Meeting . . . Sheraton Boston Hotel, Boston, Mass. Contact: Nick Semenuk, Squibb Institute for Medical Research, P.O. Box 4000, Princeton, N.J. 08540.

Jun 19-20. Canadian Documents/Microdocumentation, 2nd International Government Documents Conference . . . Guelph University, Canada. Sponsor: New York State Government Documents Task Force. Contact: Janet Gregor, Schaffer Library, Union College, Schenectady, N.Y. 12308. Deadline: May 1, 1975.

Jun 29-Jul 5. American Library Association, Annual Conference . . . San Francisco.

Jul 22-25. Mechanised Information Storage & Retrieval Systems, 5th Cranfield Conference . . . England. Contact: Cyril Cleverdon, Cranfield Institute of Technology, Cranfield, Bedford MK43 0AL, England.

Jul 23-26. Institute of Management Sciences, 22nd International Meeting . . . Kyoto, Japan. Write: Gerald M. Hoffman, Liaison Director, TIMS XXII-Kyoto, Standard Oil Co. (Indiana), 200 East Randolph Drive, Room 0904, Chicago, Ill. 60601.

REVIEWS

Directory of Data Bases in the Social and Behavioral Sciences. Sessions, Vivian S., ed. New York, Science Associates/International, Inc. 1974. 312p. \$35.00

If ever a myth existed that library oriented information personnel are not concerned with the details of substantive data files, particularly in machine readable format, it has now been dispelled once and for all by Professor Vivian Sessions. Professor Sessions, a librarian of high reputation and the founding director of the Center for the Advancement of Library-Information Science of the City University of New York, is the editor of this first major international directory of social science data bases. Not only are many of the data bases listed in the directory interfaced with library or information services of social science oriented research centers, governmental bodies and/or projects, but some of the data bases listed are also located in libraries and are maintained by librarians, as in the case of the Alabama Development Office Planning Reference Service and the National Association of Housing Redevelopment Officials. Librarians now have a useful tool to assist them in closing the gap between the seekers of primary data and the data files.

One striking characteristic of this directory is the feeling one gets of the editor's genuine concern for making this tool truly useful and reliable for the users. This has been demonstrated in a number of ways. The introduction provides users of the directory with extensive definitions of what is meant by data base and data center. The methodology employed in compiling the directory, citing its scope, strengths and limitations, is also described in detail. Use of the directory is illustrated by way of a sample entry accompanied by graphic and clear notations of each informational element. The elements included under each entry have been selected with care, providing only those germane to the informational needs of data file seekers. In short, this directory was compiled by an editor who has a clear understanding of the data base function and the informational needs of data file seekers.

The listing proceeds alphabetically by center name and is supplemented by four indices. The first, a subject index of major categories and keywords, allows the user access to the data centers by subject and provides a handy reference for related topics and headings. The second index, "Institutional Index by Distinctive Names and Acronyms," is useful when a particular acronym baffles a user (e.g., DUALABS for National Data Use and Access Laboratories, Inc.). The individual or data center manager respon-

sible for supplying the information for his/her center is listed in the personnel index, thus offering the user a specific contact at each institution. Finally, the "Geographic Index," arranged alphabetically by country, and by state for the U.S., is useful for locating data centers in a particular locale.

As the editor points out in the introduction, information on each of the nearly 700 data bases listed depended on mail-out and mail-back questionnaires; rumors, references to or speeches about data centers or data bases were not acceptable substitutes for listing. Consequently, some well-known data centers and data bases were not included due to their failure to reply to standard follow-ups and repeated requests. Reasons for this non-response or lack of cooperation are complex and many, the most obvious being the reluctance of data centers to be inundated by requests once the existence of a certain data file is publicly known through listing. On the other hand, the high cost of originating a data file and the user's willingness to share the burden motivated many data centers to list their holdings, expecting others to reciprocate. This resulted in an unusually large number of data centers responding to the questionnaire, and hopefully by the time the current volume is ready to be updated, many more data centers will respond to the query.

In the opinion of this reviewer, *Directory of Data Bases in the Social and Behavioral Sciences* has achieved a landmark in the history of repeated and often futile efforts of many who have attempted to compile a list of social science data archives.

Elizabeth K. Miller
Drexel University
Philadelphia, Pa.

Special Libraries—Worldwide. Günther Reichardt, ed. Verlag Dokumentation, Pullach/Münich, 1974. IFLA Publications I Series eds. W. R. H. Koops and P. Havard-Williams. 360p. ISBN 3-7940-4421-5. (D-8023 Pullach bei München, P.O. Box 148, Federal Republic of Germany)

The first volume of the new monograph series of the International Federation of Library Associations is subtitled "A Collection of Papers Prepared for the Section of Special Libraries" [IFLA].

The collected papers were presented to the IFLA Special Libraries Section from 1965 through 1970. It is unfortunate that earlier publication was not possible or that the papers were not updated (at least by the addition of a supplement to each). Nonetheless, this volume of working papers should be carefully studied by special librarians and those persons who are interested in the development of special librarianship around the world.

The series editors note quite accurately that: "The coloured character with regard to style and goal of the single papers most of which published in the English versions has not been changed" [sic]. Because English language versions were chosen to be published, it is unfortunate that a little more editorial effort was not expended to convert into standard English those awkward English constructions occurring in the translations from non-English-language authors. Proof reading of compositors' errors should have been to a higher standard for a book of such significance as this first in the IFLA series.

Several items particularly caused this reviewer to note that terminology in the field of special librarianship has had global problems similar to those experienced in North America. These problems appear to have arisen from the lack of understanding of "documentation" as a tool of total librarianship because "documentation" could be—and was—most readily applied in special libraries in the fields of science and technology. The concept of special librarianship in its totality seems also to have eluded IFLA's predecessor organization for a period from 1947 to 1953; during this period organized special library activity in IFLA had been eliminated *de jure*.

Concepts for the Social Science Sub-Section in IFLA may be somewhat astonishing to SLA readers because of concern with economics as the basis for social research for social, cultural and educational affairs.

The volume can provide many examples for a well-informed teacher of special librarianship, but unless the teacher can furnish an interpretive commentary, the beginning student may become lost.

For those practitioners who find it difficult to define the term, *special libraries*, a very important terminology is suggested by the name of the IFLA Special Libraries in French: Section des Bibliothèques Spécialisées. Perhaps we are all really *specialized*!

E. With-Patrick
Transindex
New York, N.Y.

PUBS

(75-060) **A Union List of Selected Microforms in Washington, D.C. Area Libraries.** SLA, Washington, D.C. Chapter, Soc. Sci. Group, 1974. xv, 23p. \$3.50. Order c/o E. S. Knauff, 2326 19th St., N.W., Washington, D.C. 20009.

Identifies microform holdings chiefly in humanities and social sciences in 37 D.C. area libraries with conditions of access.

(75-061) **Giant Strides Since Andrew Carnegie: Creative Architecture in the King County Library System.** Veblen, Marthanna E. Seattle, Wash., The Shorey Book Store, 1974. 81p. ISBN 0-8466-0309-8

(75-062) **Libros en Venta.** rev. ed. Buenos Aires, Argentina, Bowker Editores S.A., 1974. 2185p. \$54.00 per 2 volume set. LC 64-3492 ISBN 0-8352-0682-3

This book provides bibliographic information on 120,000 titles currently available in Spanish. Contains author, title, and subject indexes.

(75-063) **A Mechanized Information Services Catalog.** Marron, Beatrice, Elizabeth Fong, and Dennis Fife. Washington, D.C., National Bureau of Standards, 1974. 56p. \$.90 SD Cat. No. C13.46:814 NTIS No. COM-74-50139

Reasons for establishing the catalog, information choices, and implementation are discussed. Also included are the plans for future development.

(75-064) **Physician's Medical Book Reference 1975.** Fort Lee, N.J., Medi-Facts Publishing Co., 1974. 503p. \$25.95. LC 74-19345 ISSN 0093-2248

Contains films and professional cassette tapes, as well as books.

(75-065) **Basic Business Directories: A Select Annotated List of One Hundred Titles.** Allott, A. M. and A. E. Bagguley, eds. London, England, The Library Association, 1974. iv, 14p. ISBN 0-85365-407-7

A list of directories which might prove useful for every library providing commercial information.

(75-066) **Subject Collections.** 4th ed. Ash, Lee, ed. New York, R. R. Bowker, 1975. ix, 908p. \$38.50 LC 67-27563 ISBN 0-8352-0435-9

Details the collections of over 15,000 academic, public, special, and museum libraries.

(75-067) **Magazines for Libraries.** 2d ed. Suppl. Katz, Bill. New York, R. R. Bowker, 1974. 328p. \$16.00 LC 72-6607 ISBN 0-8352-0761-7

Approximately 1,800 newer periodicals are evaluated.

(75-068) **Map Librarianship: Readings.** Drazniowski, Roman, comp. Metuchen, N.J., Scarecrow Press, 1975. vii, 548p. LC 74-19244 ISBN 0-8108-8739-4

A compilation and reprinting of selected articles for the map librarian. A bibliography is included.

(75-069) **Automated Design of Control Systems.** Merriam, C. W., III. New York, Gordon and Breach Science Publ., 1974. XV, 339p. \$32.50 LC 73-86001 ISBN 0-677-04440-2 (also available in paperback)

This is volume 5 in the series Information and Systems Theory.

(75-070) **DBMS: User Experience in the USA.** Davis, Brian. Newton Abbot, Devon, England, David and Charles Holdings, Ltd., 1975. 82p. £2.80 UK ISBN 0-85012-128-0

Printed for the National Computing Center, Manchester, England. The results of an investigation of 21 companies are presented in this volume. Each type of data base management (DBM) system currently in U.S. use is discussed.

(75-071) **Encyclopedia of Library and Information Science.** v.13. Kent, Allen, Harold Lancour, and Jay E. Daily, eds. New York, Marcel Dekker, 1975. vii, 496p. \$55.00/single volume. \$45.00 subscription price per volume. LC 68-31232 ISBN 0-8247-2013-x

Volume 13 covers Inventories through Korea.

(75-072) **Journal of Homosexuality.** v.1(no.1) 1974. Silverstein, Charles, ed. New York, Hawthorth Press. Quarterly. \$12.00 per year for individuals. \$25.00 for libraries and institutions. LC 74-78295 ISSN 0091-836-9

The journal is devoted to empirical and clinical research and is geared toward helping professionals in clinics, hospitals, and counseling services. It contains a subject-specific annotated bibliography.

(75-073) **Measuring Business's Social Performance: The Corporate Social Audit.** Corson, John J. and George A. Steiner. New York, Committee for Economic Development, 1975. xi, 75p. \$4.00 LC 74-19382 ISBN 0-87186-239-5

The book discusses the history, role, and rationale of corporate social involvement.

(75-074) **A Guide to Canadian Health Science Information Services and Sources.** Russell, Phyllis J., ed. Ottawa, Ont., Canada, Canadian Library Association, 1975. ii, 34p. \$3.50 ISBN 0-88802-103-8

(75-075) **Standard Technical Report Number.** New York, American National Standards Institute, 1974. 8p. ANSI Z39.23-1974.

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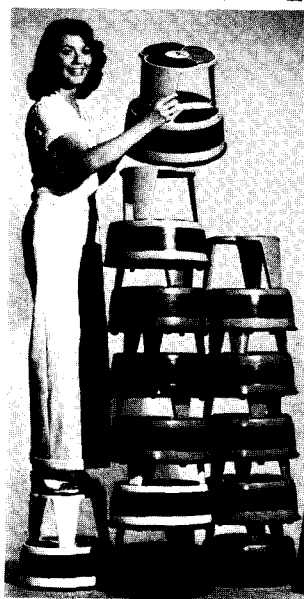
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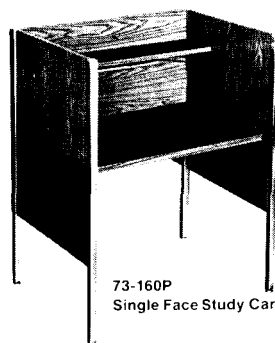
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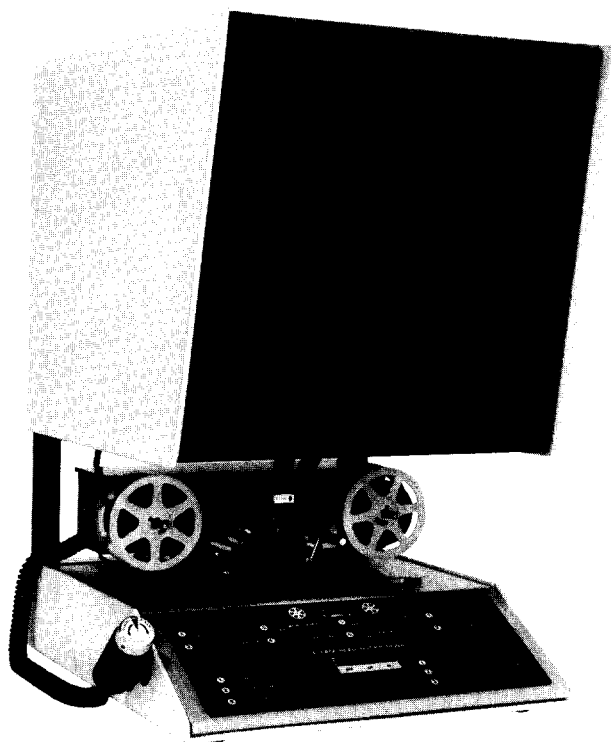
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